City of Taunton Contributory Retirement System

Actuarial Valuation Report

Plan Year: January 1, 2024

October 2024

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Gallagher

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October 2024

Taunton Retirement Board
104 Dean St., Suite 203
Taunton, MA 02780

Gallagher is pleased to present this report presenting an actuarial valuation for the Retirement System for the plan sponsor's plan year ending December 31, 2024.

Purpose of this Report

Gallagher was retained by the City of Taunton to prepare this report to:

1. analyze the current funded position of the System and determine the level of contributions necessary to assure sound funding; and
2. update the Section 22D funding schedule currently in place for the Retirement System.

Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Gallagher recommends requesting an advance review of any statement, document, or filing based on information contained in this report. Gallagher will accept no liability for any such statement, document or filing made without prior review by Gallagher.

Data Used

Gallagher performed the calculations using participant data as of January 1, 2024 and financial data as of December 31, 2023 both supplied by the Retirement Board. Gallagher reviewed the data for reasonableness and consistency with data for the 2024 valuation but performed no audit of the data. The accuracy of the results of the valuation is dependent on the accuracy of the data.

Actuarial Certification

Actuarial Standard of Practice No. 56 ("ASOP 56") provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. Gallagher uses third-party software in the performance of annual actuarial valuations and projections. The model is intended to calculate the liabilities associated with the provisions of the plan using data and assumptions as of the measurement date under the funding methods specified in this report. The output from the third-party vendor software is used as input to an internally developed model that applies applicable funding methods and policies to the liabilities derived and other inputs, such as plan assets and contributions, to generate many of the exhibits found in this report. Gallagher has an extensive review process whereby the results of the liability calculations are checked using detailed sample output, changes from year to year are summarized by source, and significant deviations from expectations are investigated. Other funding outputs and the internal model are similarly reviewed in detail and at a high level for accuracy, reasonability, and consistency with prior results. Gallagher also reviews the third-party model when significant changes are made to the software. The review is performed by experts within the company who are familiar with applicable funding methods as well as the manner in which the model generates its output. If significant

changes are made to the internal model, extra checking and review are completed. Significant changes to the internal model that are applicable to multiple clients are generally developed, checked, and reviewed by multiple experts within the company who are familiar with the details of the required changes.

Actuarial Standards of Practice (ASOPs) 27 and 35 require the actuary to identify the economic and demographic assumptions that have a significant effect on the measurement and, for those that are prescribed by another party, to provide the information and analysis the actuary performed to determine that the assumption does not significantly differ from what the actuary deems reasonable for the purpose of the measurement.

The mortality assumption used in this valuation reflects the Society of Actuaries' most recently published tables of public sector pension plan rates. Other significant demographic assumptions were based on an analysis of plan experience. A gain/loss analysis is performed each year, itemized by assumption source, which the actuary uses either to help ascertain that assumed rates are still appropriate, or to indicate possible modifications.

In the case of the Retirement Board's selection of the long-term expected rate of return (EROA), the signing actuary has used economic information and tools provided by Gallagher's Financial Risk Management ("FRM") practice. A spreadsheet tool created by the FRM team converts averages, standard deviations, and correlations from Gallagher's Capital Markets Assumptions ("CMA") that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. Percentiles are based on standard matrix multiplication and normal approximations. This simplified model (disclosed here in compliance with ASOP 56) ignores inter-period dependence and the skewed nature of single year returns. As such it is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. However, it does take into account the duration (horizon) of investment and the approximate allocation of assets in the portfolio to various asset classes with different expected returns, standard deviations, and correlations to other asset classes. Under current calibrations, the EROA tool will tend to show higher expected returns for longer durations and will show a greater divergence between arithmetic and geometric average returns the higher the standard deviation of portfolio return. Based on the actuary's analysis, including consistency with other assumptions used in the valuation, and the percentiles generated by the spreadsheet described above, the actuary believes the EROA does not significantly conflict with what, in the actuary's professional judgment, is reasonable for the purpose of the measurement.

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

The Section 22D contributions shown in this report satisfy the requirement of ASOP 4 to disclose a reasonable actuarially determined contribution. The balance among benefit security, intergenerational equity, and stability or predictability of actuarially determined contributions, the timing and duration of expected benefit payments, the nature and frequency of plan amendments, and relevant input from the principal were taken into account when determining the actuarial cost method, smoothing period for the actuarial value of assets and the amortization period and method for any unfunded actuarial accrued liability.

Where presented, references to "funded percentage" and "unfunded accrued liability" typically are measured on an actuarial value of assets basis. It should be noted that the same measurements using market value of assets would result in different funded percentages and unfunded accrued liabilities. Also, the "net pension liability" and "plan fiduciary net position as a percentage of the total pension liability" are measured on a market value of assets basis. These items presented may be appropriate for evaluating the need and level of future contributions but make no assessment regarding the cost to settle (i.e., purchase annuities to cover) any portion of the Fund's liabilities.

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Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, changes expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions, applicable law or regulations. An analysis of the potential range of such future differences is beyond the scope of this valuation.

The report was prepared under our supervision and in accordance with all applicable Actuarial Standards of Practice. We are Enrolled Actuaries and Members of the American Academy of Actuaries. Hilja is a Fellow of the Society of Actuaries and Jason is an Associate of the Society of Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein, and we are available to discuss this report with you.

Respectfully Submitted,

Buck Global, LLC (Buck),
Gallagher Benefit Services, Inc. (hereinafter "Gallagher")

Hilja Viidemann

_____ 10/15/2024

Hilja Viidemann, FSA, MAAA, EA — Date
Director, U.S. Defined Benefit Consulting and Administration

_____ 10/10/2024

Jason Fine, ASA, MAAA, EA, FCA — Date
Principal, U.S. Defined Benefit Consulting and Administration

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Section I - Summary Of Principal Results

1. For convenience of reference, the principal results of the valuation as of January 1, 2024 are summarized below along with a comparison with the amounts in the previous valuation as of January 1, 2022.

Valuation Date		January 1, 2022	January 1, 2024
a)	Active Members:		
	Number	1,054	1,136
	Annual compensation	$ 67,958,858	$ 77,699,978
	Average age	48.1	47.1
	Average service	12.4	11.1
	Average compensation	$ 64,477	$ 68,398
b)	Pensioners and beneficiaries:		
	Number	975	1,009
	Annual benefit payments	$ 31,934,267	$ 36,223,015
	Average benefit	$ 32,753	$ 35,900
c)	Inactive employees:		
	Number	231	248
	Accumulated employee contributions	$ 2,822,026	$ 3,050,282
d)	Actuarial accrued liability	$ 518,813,930	$ 561,452,833
e)	Market value of assets	$ 454,211,519	$ 421,188,628
f)	Assets for valuation purposes	$ 411,393,175	$ 450,165,100
g)	Unfunded actuarial accrued liability (d. – f.)	$ 107,420,755	$ 111,287,733
h)	Funded percentage (f. ÷ d.)	79.29%	80.18%
i)	Section 22D funding for fiscal 2025	$ 20,943,987	$ 20,943,987
j)	Section 22D funding for fiscal 2026	$ 21,803,325	$ 20,644,429

A projection of Section 22D costs is presented in Section IV. Schedule A of this report outlines the actuarial assumptions and methods employed. The provisions of the System are summarized in Schedule B. The valuation includes additional liabilities resulting from Chapter 17 COLA legislation. The contributions determined by the funding policy and developed in this report exceed the normal cost plus interest on the unfunded actuarial accrued liability. Under this funding policy, the unfunded actuarial accrued liability is expected to be amortized by 2032.

Section II - Membership Data

In order to calculate the aggregate liabilities and assets on account of members of the System as of January 1, 2024, data was needed with respect to each active and retired member and beneficiary of the System. The data with respect to active, retired and terminated members and beneficiaries were furnished to the actuary by the Retirement Board.

From the data, tabulations were made showing, as of January 2024, the number and annual compensation of active members classified by age and years of service and the number and annual retirement allowances of retired members and beneficiaries as of January 1, 2024, classified by age. These tables are presented in Schedule C.

The following tables show the number of active and retired members of the Retirement System as of January 1, 2024.

Table I - The Number and Annual Compensation of Active Members as of January 1, 2024

Group	Number	Compensation
General employees	841	$ 45,661,483
Police and Fire	295	$ 32,038,494
Total	1,136	$ 77,699,978

Table II - The Number and Annual Retirement Allowances of Retired Members and Beneficiaries as of January 1, 2024

	Annual Retirement Allowance	
Group	Number	Pension[1]
Service Retirements	808	$29,627,827
Disability Retirements	81	$ 3,628,158
Beneficiaries of Deceased Members	120	$ 2,967,030
Grand Total	1,009	$36,223,015

In addition, there are 248 members with accumulated contributions valued at $3,050,282.

[1] Pension amounts exclude cost-of-living adjustments applied after July 1, 1981, and prior to July 1, 1998, which are funded by the Commonwealth of Massachusetts.

Section III - Assets

The amount of assets taken into account in this valuation is based on financial information reported by the Retirement Board. As of January 1, 2024, the reported market value of Retirement System assets amounted to $421,188,628. The actuarial value of assets for valuation funding purposes is $450,165,100. Valuation assets are developed using a smoothing method (described in Schedule A of this report) in order to smooth the year-to-year fluctuations due to deviations of investment returns from expected levels.

Year Ending	December 31, 2022	December 31, 2023
1. Market value of plan assets, prior year end	$ 454,211,519	$ 387,737,221
2. Employer and employee contributions, net transfers and reimbursements	$ 28,936,290	$ 29,579,222
3. Expenses	$ (606,104)	$ (665,616)
4. Benefits and refunds	$ (35,267,342)	$ (37,937,868)
5. Expected interest during the year	$ 34,234,496	$ 29,096,530
6. Expected market value of plan assets, current year	$ 481,508,859	$ 407,809,488
7. Actual market value of plan assets, current year	$ 387,737,221	$ 421,188,628
8. Investment gain/(loss) during prior year [7. – 6.]	$ (93,771,639)	$ 13,379,140
9. Investment gain/(loss) during second prior year	$ 35,972,723	$ (93,771,639)
10. Investment gain/(loss) during third prior year	$ 10,970,552	$ 35,972,723
11. Investment gain/(loss) during fourth prior year	$ 37,977,862	$ 10,970,552
12. Tentative Valuation Assets before reflecting 80% - 120% corridor = [7. – 80% x 8. – 60% x 9. – 40% x 10. – 20% x 11.]	$ 429,187,105	$ 450,165,100
13. 80% of actual market value = 80% x 7.	$ 310,189,777	$ 336,950,903
14. 120% of actual market value = 120% x 7.	$ 465,284,664	$ 505,426,353
15. Valuation Assets = 12. But not less the 13. or greater than 14.	$ 429,187,105	$ 450,165,100
16. Ratio of actuarial value to market value	110.69%	106.88%
17. Actuarial Value Return for prior year	6.06%	7.06%
18. Market Value Return for prior year	(13.21)%	11.08%

Section IV - Actuarial Liabilities and Normal Cost

Liabilities are measured biannually using the individual entry age normal cost method. This method allocates an individual's total liability to each year of that individual's career as a level percent of pay. The amount attributable to past service is the actuarial accrued liability. The amount allocated to the valuation year is the normal cost.

Actuarial Accrued Liability		January 1, 2022	January 1, 2024
1.	Active Members	$ 190,614,775	$ 192,925,059
2.	Service Retirements	265,077,394	299,404,724
3.	Disability Retirements	34,815,184	27,879,623
4.	Beneficiaries of Deceased Members	25,484,551	38,193,145
5.	Inactive Members	2,822,026	3,050,282
6.	Total	$ 518,813,930	$ 561,452,833

Normal Cost		January 1, 2022	January 1, 2024
1.	Gross Normal Cost	$ 8,878,598	$ 9,789,442
2.	Expected Administrative Expenses	600,000	600,000
3.	Total Normal Cost	$ 9,478,598	$ 10,389,442
4.	Expected Employee Contributions	6,247,162	7,211,313
5.	Employer Normal Cost (3. - 4.)	$ 3,231,436	$ 3,178,129

Determination of Actuarial (Gain)/Loss		2022	2023
1.	Actuarial Accrued Liability as of the beginning of year	$ 518,813,930	$ 533,903,533
2.	Gross Normal Cost	10,000,895	10,508,140
3.	Benefit Payments	(33,838,886)	(36,414,178)
4.	Interest	38,927,594	40,016,885
5.	Expected Actuarial Accrued Liability as of the end of year	$ 533,903,533	$ 548,014,381
6.	Actuarial Accrued Liability as of the end of year[1]	533,903,533	561,452,833
7.	Liability (Gain)/Loss (6. - 5.)		13,438,452

Sources of (Gain)/Loss		
1.	COLA Experience	2,358,276
2.	Salary Experience	5,539,897
3.	Retiree Mortality	(1,026,832)
4.	Active Decrements	5,488,555
5.	New Entrants/Rehires	2,559,395
6.	Miscellaneous	(1,480,839)
7.	Total	13,438,452

[1] Actuarial accrued liability as of the beginning of non-valuation years is set equal to expected. (Gains)/losses are recognized at the following valuation date.

Section V - Contributions Payable Under the System

Section 22D of MGL Chapter 32 outlines various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs. The normal cost and unfunded actuarial liability are to be calculated in accordance with the individual entry-age-normal actuarial cost method. The contribution toward amortization of the unfunded actuarial liability may increase by up to 4½% each year.

The table on the following page presents a projection of contributions that satisfy the Section 22D requirements. The forecast is based upon an assumption of a stable population in which the total payroll and normal cost of the system are expected to increase 4.5% per year. The employee contribution rate is expected to increase to 10.5% by 2036 as members contributing base percentages 5%, 7%, and 8% are replaced by new members, whose base contribution is 9% in addition to the 2% over $30,000 contribution. The unfunded accrued liability contribution is also based on a 4.5% annual increase and is assumed to be paid quarterly over the fiscal year. This schedule incorporates the funding required to provide annual COLAs under Chapter 17 of the Acts of 1997.

Please note that the amounts shown in the schedule on the following page for the 2025 fiscal year represent the actual amounts already appropriated by the City for the 2025 fiscal year.

The 2026 appropriation is approximately $20.6 million, or about 5.6% lower than the amount shown in the 2022 valuation report. This is the result of an extension of the end of the amortization period from fiscal 2030 to fiscal 2032 which offset the impact of generally unfavorable actuarial experience. The primary factors leading to changes in the appropriation are:

1. The plan experienced a (13.2%) return on the market value of assets in 2022, and an 11.1% return on market value in 2023, for an average annual return of (1.9%) for the two-year period. This generated a loss on the actuarial value of assets that accounted for an increase of approximately $1.9 million.
2. The demographic experience over the past two years was unfavorable. The primary sources of the loss were pay increases that were greater than expected, earlier retirements than expected and the additional 2% COLA granted in July 2022. This accounted for an increase of about $2.9 million.
3. The change in the amortization period from ending in 2030 to 2032 decreased the appropriation by about $6.1 million.

Amortization Schedule

Description	Outstanding Balance as of January 1, 2024	Amortization Payment as of January 1, 2024	Remaining Period as of January 1, 2024
Unfunded Actuarial Liability	$ 110,887,881	$ 15,319,910	8
FY 2004 Appropriation Deferral	399,852	202,848	2
Total	$ 111,287,733	$ 15,522,758	

Section V - Contributions Payable Under the System (continued)

Pension Reform Act - Section 22D Funding Requirements

Fiscal Year Ending	Payroll[1]	Unfunded Accrued Liability[2]	Employee Contribution	Employer Normal Cost with Interest	Amortization Payments with Interest	Employer Total Cost with Interest	Employer Total Cost % of Payroll	Funded Ratio %[2]
2025	77,699,978	111,287,733	7,211,313	3,602,480	17,341,507	20,943,987	27.0%	80.2%
2026	81,196,477	101,956,982	7,625,805	3,522,135	17,122,294	20,644,429	25.4%	81.9%
2027	84,850,318	92,433,559	8,062,998	3,580,397	17,656,670	21,237,067	25.0%	83.6%
2028	88,668,582	81,647,459	8,524,096	3,636,769	18,451,220	22,087,989	24.9%	85.4%
2029	92,658,668	69,240,119	9,010,365	3,690,965	19,281,525	22,972,490	24.8%	87.9%
2030	96,828,308	55,052,256	9,523,137	3,742,674	20,149,194	23,891,868	24.7%	90.5%
2031	101,185,582	38,910,859	10,063,813	3,791,562	21,055,907	24,847,469	24.6%	93.4%
2032	105,738,933	20,628,075	10,633,865	3,837,271	22,003,422	25,840,693	24.4%	96.6%
2033	110,497,185	0	11,234,843	3,879,417	0	3,879,417	3.5%	100.0%
2034	115,469,558	0	11,868,375	3,917,585	0	3,917,585	3.4%	100.0%
2035	120,665,688	0	12,536,175	3,951,332	0	3,951,332	3.3%	100.0%
2036	126,095,644	0	13,240,043	3,980,183	0	3,980,183	3.2%	100.0%
2037	131,769,948	0	13,835,845	4,159,291	0	4,159,291	3.2%	100.0%
2038	137,699,596	0	14,458,458	4,346,459	0	4,346,459	3.2%	100.0%
2039	143,896,078	0	15,109,088	4,542,051	0	4,542,051	3.2%	100.0%
2040	150,371,402	0	15,788,997	4,746,443	0	4,746,443	3.2%	100.0%
2041	157,138,115	0	16,499,502	4,960,033	0	4,960,033	3.2%	100.0%
2042	164,209,330	0	17,241,980	5,183,233	0	5,183,233	3.2%	100.0%
2043	171,598,750	0	18,017,869	5,416,479	0	5,416,479	3.2%	100.0%
2044	179,320,694	0	18,828,673	5,660,221	0	5,660,221	3.2%	100.0%
2045	187,390,125	0	19,675,963	5,914,931	0	5,914,931	3.2%	100.0%
2046	195,822,681	0	20,561,382	6,181,102	0	6,181,102	3.2%	100.0%
2047	204,634,702	0	21,486,644	6,459,252	0	6,459,252	3.2%	100.0%
2048	213,843,264	0	22,453,543	6,749,918	0	6,749,918	3.2%	100.0%
2049	223,466,211	0	23,463,952	7,053,665	0	7,053,665	3.2%	100.0%
2050	233,522,190	0	24,519,830	7,371,080	0	7,371,080	3.2%	100.0%
2051	244,030,689	0	25,623,222	7,702,779	0	7,702,779	3.2%	100.0%
2052	255,012,070	0	26,776,267	8,049,403	0	8,049,403	3.2%	100.0%
2053	266,487,613	0	27,981,199	8,411,627	0	8,411,627	3.2%	100.0%
2054	278,479,556	0	29,240,353	8,790,150	0	8,790,150	3.2%	100.0%
2055	291,011,136	0	30,556,169	9,185,706	0	9,185,706	3.2%	100.0%

[1] Calendar basis

[2] As of preceding January 1

Section VI – PERAC Annual Statement

The most recent actuarial valuation of the System was prepared by Gallagher as of January 1, 2024

The normal cost for employees on that date was:	$7,211,313	9.3% of pay
The normal cost for the employer was:	3,178,129	4.1% of pay
The actuarial liability for active members was:		$192,925,059
The actuarial liability for retired and inactive members was:		368,527,774
Total actuarial accrued liability:		$561,452,833
System assets as of that date:		450,165,100
Unfunded actuarial accrued liability:		$111,287,733
The ratio of system's assets to total actuarial liability was:		80.2%

The principal actuarial assumptions used in the valuation are as follows:

Investment Return:	7.60%
Rate of Salary Increase:	4.00%

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a percent of Covered Payroll (b - a) / c
1/1/2024	$450,165,100	$561,452,833	$111,287,733	80.2%	$77,699,978	143.2%
1/1/2022	411,393,175	518,813,930	$107,420,755	79.3%	67,958,858	158.1%
1/1/2020	346,384,426	465,010,765	$118,626,339	74.5%	67,239,674	176.4%
1/1/2018	317,021,969	398,178,738	$81,156,769	79.6%	62,755,282	129.3%

Schedule A - Actuarial Assumptions and Methods

Actuarial Cost Method

Individual entry-age normal cost method.

Asset Valuation Method for Funding Purposes

For funding calculation purposes, assets are valued according to the following general formula, provided such value is within a 20% corridor of the market value:

$VA = MV - .8I_1 - .6I_2 - .4I_3 - .2I_4$ where

VA = Valuation assets.

MV = Market value of assets as of the valuation date.

I_n = Investment gain (loss) during n^{th} year preceding the valuation date.

Valuation Interest Rate

7.60% per annum, compounded annually, net of investment expenses. The long-term expected rate of return on Fund investments was determined using best-estimate ranges of expected future nominal rates of return (expected returns, net of investment expense and inflation) developed for each major asset class using an econometric model that forecasts a variety of economic environments and then calculates asset class returns based on functional relationships between the economic variables and the asset classes.

Mortality

Plan liabilities as of January 1, 2024 were valued using rates taken from *Pub-2010 Public Retirement Plans Mortality Tables Report* from the Society of Actuaries dated January 2019. These rates are applied as follows:

Participant Group	Non-disabled	Disabled
General Employees	PubG-2010 Healthy	PubG-2010 Disabled
Police and Fire	PubS-2010 Healthy	PubS-2010 Disabled
Contingent survivors	Contingent survivors table (total dataset)	N/A

All rates are amount-weighted and projected from 2010 to 2025 with Scale MP-2021. Separate annuitant and non-annuitant rate tables were used.

It is assumed that 80% of all active deaths are ordinary (20% are service connected).

Schedule A - Actuarial Assumptions and Methods (continued)

Separations from Active Service

Representative values of the assumed annual rates of withdrawal and vesting, disability and service retirement, all based on an analysis of experience, are as follows:

General Employees-Annual Rates of

Age	Disability	Service Retirement				Years of Service	Rates of Withdrawal
		Hired before 4/2/2012		Hired on or after 4/2/2012			
		Male	Female	Male	Female		
25	.010%					0	18.21%
30	.015					1	20.80%
35	.035					2	17.62%
40	.066					3	14.82%
45	.097					4	12.20%
50	.127	3.60%	10.19%			5	10.20%
55	.157	4.77	4.69			10	6.50%
60	.182	10.57	7.74	4.77%	4.69%	15	4.17%
62	.190	14.73	11.68	6.32	5.09	20	4.00%
65	.158	26.15	19.39	10.57	7.74	25	4.00%
69	.140	25.00	20.00	21.36	17.08	30+	0.00%

Police and Fire-Annual Rates of

Age	Disability	Service Retirement		Years of Service	Rates of Withdrawal
		Hired before 4/2/2012	Hired on or after 4/2/2012		
		Male & Female	Male & Female		
25	.050%			0	1.50%
30	.097			1	1.50%
35	.204			2	1.50%
40	.250			3	1.50%
45	.401			4	1.50%
50	.763	1.44%	0.72%	5	1.50%
55	.757	8.79	3.89	10	1.50%
60	.650	14.55	14.55	15	1.50%
62	.650	27.41	27.41	20	0.00%
65		100.00	100.00	25	0.00%
69		100.00	100.00	30+	0.00%

It is assumed for the general employees that 30% of all disabilities are ordinary (70% are service connected). For police and fire employees, 5% of all disabilities are assumed to be ordinary (95% are service connected). A load was applied to the accidental disability liability to account for the additional benefit payable for each dependent child upon the member's disability. Loads of approximately 2% and 11.7% were developed for Group 1 and Group 4, respectively, taking into account the higher likelihood of Group 4 accidental disabilities at younger ages, thus the likelihood of Group 4 having more dependent children than Group 1 accidental disability retirees.

Schedule A - Actuarial Assumptions and Methods (continued)

Salary Scale

4.00% per annum.

Cost-of-Living Adjustments

Retirement benefits were assumed to increase annually at the assumed inflation rate of 3.00%, up to the applicable annual maximum.

Form of Payment

Future retirees are assumed to elect a Life Annuity. Future vested terminations are assumed to elect a refund of contributions unless specifically reported by the plan sponsor to be eligible for an annuity benefit.

Marital Percentage

80% of participants are assumed to be married at death. Husbands are assumed to be 3 years older than their wives.

Loading or Contingency Reserve

None.

Administrative Expenses

The normal cost is increased by an amount equal to the anticipated administrative expenses for the upcoming fiscal year. The amount for plan year 2024 is $600,000. Beginning in the 2025 plan year, administrative expenses are assumed to be $700,000 and is anticipated to increase at 4.5% per year thereafter.

Changes in Assumptions Since the Prior Valuation

Administrative expenses are assumed to increase from $627,000 to $700,000 in the 2025 plan year. The 4.5% annual increase assumption remains the same.

Schedule B - Summary of System Provisions

Membership

The Retirement System covers all employees of participating units except teachers, elected officials and those employees in service at the time of its establishment who elected not to become members. Eligible employees in the City who enter service on or after the date the System became operative for their classification may become members of the Retirement System on their own application.

Summary of Benefit and Contribution Provisions

A summary of the main benefit and contribution provisions of the Retirement System, as interpreted for the valuation, is presented below.

The terms “Group 1” and “Group 4” are used to denote “general employees” and “police and fire”, respectively.

Benefits

Final Average Salary (FAS)

For those hired prior to April 2, 2012, the average of a member’s three highest consecutive years’ compensation. For those hired on or after April 2, 2012, the average of a member’s five highest consecutive years’ compensation. For those hired on or after January 1, 2011, salary taken into account for benefit purposes is capped at 64% of the IRC Section 401(a)(17) limit (indexed).

Superannuation Retirement

Eligibility

For those hired prior to April 2, 2012: Age 65 for Group 1; Age 55 for Group 4. Maximum retirement age is 70 for Group 1 and 65 for Group 4.

For those hired on or after April 2, 2012: Age 67 for Group1; Age 57 for Group 4 if member has completed 30 years of service, or age 62 otherwise.

Allowance

2.5% per year of service times FAS. Maximum total allowance is 80% of FAS. Veterans receive additional $15 annually per year of service to a maximum of $300 annually.

Early Retirement

Eligibility

For those hired prior to April 2, 2012: 20 years of service, or age 55 with 10 years of service.

For those hired on or after April 2, 2012: age 60 and 10 years of service for Group 1; Age 55 for Group 4.

Allowance

Calculated as a superannuation retirement allowance (including veteran’s benefits) except accrual rate is equal to 2.5% reduced by .1% for each year age at retirement is below either 65 for Group 1 or 55 for Group 4. Those hired on or after April 2, 2012 who retire with fewer than 30 years of service, the accrual rate of 2.5% is reduced by .15% for each year age at retirement precedes age 67 for Group 1 or age 57 for Group 4. Those hired on or after April 2, 2012 who retire with at least 30 years of service, the accrual rate of 2.5% is reduced by .15% for each year age at retirement precedes age 62 for Group 1 or age 57 for Group 4.

The minimum allowance after 30 years of service is equal to:

(1) An annuity which is the actuarial equivalent of member’s accumulated deductions; and

(2) A pension equal to 1/3 of FAS and any veteran’s benefits as described under superannuation retirement.

Schedule B - Summary of System Provisions (continued)

Vested Retirement

Eligibility

10 years of service. For certain involuntary terminations, this is reduced to 6 years.

Allowance

A superannuation retirement allowance commencing at age 55 for Group 1 members (age 60 if hired on or after April 2, 2012) and age 45 for Group 4 members (age 55 if hired on or after April 2, 2012) or later, where the accrual rate is determined by the age of the member at the time the allowance commences.

In lieu of the deferred pension benefit, a member may elect to receive a refund of their accumulated contributions.

Ordinary Disability

Eligibility

10 years of service.

Allowance

An immediate allowance equal to the age 55 rate (age 60 for Group 1 members hired on or after April 2, 2012) per year of service times FAS.

Veterans receive an allowance equal to:

(1) An annuity which is the actuarial equivalent of their accumulated deductions; and

(2) A pension which is the greater of 50% of current salary and the service retirement allowance to which they are eligible, if any.

Accidental Disability

Eligibility

Permanent incapacity for further duty as a result of personal injury sustained while in the performance of duties.

Allowance

An immediate allowance equal to:

(1) An annuity which is the actuarial equivalent of the member's accumulated deductions; and

(2) A pension equal to 72% of current salary; and

(3) A supplement equal to $1,092.60 per year per child who is under 18 at the time of the member's retirement, with no age limitation if the child is mentally or physically incapacitated from earning. The additional pension may continue up to age 22 for any child who is a full-time student at an accredited educational institution.

The maximum total allowance is 100% of current salary.

Accidental Death Benefit

Eligibility

Death due to an occupational injury.

Allowance

An immediate allowance equal to:

(1) A lump sum payment equal to the accumulated deductions at death; and

(2) A pension equal to 72% of current salary and payable to the surviving spouse, dependent children, or the dependent parents; and

(3) A supplement of $1,092.60 per year per child payable to the spouse or legal guardian until all children reach age 18, or 22 if a full-time student, unless mentally or physically incapacitated.

The maximum total allowance is 100% of current salary.

Schedule B - Summary of System Provisions (continued)

Death in Active Service

Eligibility

Death of a member due to a non-occupational injury.

Allowance

An immediate allowance that would have been payable had the member retired and elected the 2/3 joint and survivor option on the day before his death. For death occurring prior to the minimum superannuation retirement age, the age 55 (age 60 if hired on or after April 2, 2012) and age 45 (age 55 if hired on or after April 2, 2012) accrual rates are used, respectively, for Group 1 and Group 4 members. The minimum annual allowance payable to the surviving spouse of a member in service who dies with at least two years of creditable service is $6,000, provided that the member and the spouse were married for at least one year and living together on the member's date of death.

For members with at least 2 years of service at death, the surviving spouse receives an additional allowance equal to the sum of $1,440 per year for the first child and $1,080 per year for each additional child until all dependent children reach age 18 or 22 if a full-time student, unless mentally or physically incapacitated. If there is no designated beneficiary or surviving spouse, then member contributions are returned. If there are dependent children but no surviving spouse, they may elect minimum survivor benefits of $3,000 per year plus $1,440 for the first child and $1,080 for each additional child.

The maximum total allowance is 100% of salary at the date of death.

Normal Form of Benefit

Reduced modified cash refund annuity.

Optional Forms of Benefit

(1) Option A — Life annuity.

(2) Option B — Modified cash refund annuity.

(3) Option C — 66-2/3% joint and survivor allowance. If the beneficiary predeceases the retiree, the benefit payable increases based on the factor used to determine the Option C benefit at retirement.

Return of Contribution

If no other benefit is payable upon termination, the member's accumulated deductions are returned.

Post-Retirement Adjustments

In accordance with the adoption of Chapter 17 of the Acts of 1997, the granting of a cost-of-living adjustment will be determined by an annual vote by the Retirement Board. The amount of increase will be based upon the Consumer Price Index, limited to a maximum of 3.0%, beginning on July 1. All retirees, disabled retirees, and beneficiaries who have been receiving benefits payments for at least one year as of July 1 are eligible for the adjustment. The maximum amount of pension benefit subject to a COLA is $16,000. All COLAs granted to members after 1981 and prior to July 1, 1998 are deemed to be an obligation of the State and are not the liability of the Retirement System:

Schedule B - Summary of System Provisions (continued)

Member Contributions

Members contribute a percentage of annual regular compensation in accordance with their respective dates of hire, as shown below:

Date of Hire	Rate of Contribution
Prior to January 1, 1975	5%
On or after January 1, 1975	7%
On or after January 1, 1984	8%
On or after July 1, 1996	9%

Members hired on or after January 1, 1979 contribute an additional 2% of compensation in excess of $30,000.

The contribution rate for Group 1 participants hired on or after April 2, 2012 and who attain 30 years of service is reduced by three percentage points.

Schedule C - Membership Tables

Table 1 – Age/Service Distribution with Salary as of January 1, 2024

Attained Age	Average Salary	< 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
Under 25	39	39									39
	29,744	29,744									29,744
25-29	78	78	11								89
	45,514	45,514	77,922								49,520
30-34	59	59	48	5							112
	51,095	51,095	84,464	94,201							67,320
35-39	55	55	46	22	7						130
	44,830	44,830	81,902	88,161	118,541						69,250
40-44	44	44	23	12	26	9	1				115
	46,055	46,055	82,034	93,766	91,027	90,390	104,262				72,373
45-49	33	33	26	13	17	23	8				120
	37,802	37,802	63,139	103,014	88,980	96,532	129,855				75,000
50-54	38	38	24	20	17	16	34	11	1		161
	42,798	42,798	68,793	72,169	85,019	92,020	119,602	124,858	205,820		82,510
55-59	38	38	37	21	30	21	18	15	12	1	193
	39,522	39,522	62,524	73,665	71,445	72,714	102,320	119,180	105,575	110,122	72,741
60-64	17	17	16	10	15	21	19	8	11	3	120
	38,874	38,874	50,741	54,307	63,018	50,915	71,769	90,486	115,226	101,743	64,087
65-69	7	7	7	6	7	4	10	3			44
	44,568	44,568	51,903	62,255	72,403	47,812	61,879	36,502			56,254
70+	1	1	4	1	2	1	1	1	1	1	13
	13,440	13,440	57,980	61,673	65,188	139,253	93,392	12,000	35,608	61,052	59,901
Total Employees	409	409	242	110	121	95	91	38	25	5	1,136
Average Salary	42,980	42,980	72,640	80,396	81,655	78,240	100,298	105,435	111,032	95,281	68,398

Schedule C - Membership Tables (continued)

Table 2 - The Number and Annual Pensions of Retired Members Distributed by Age as of January 1, 2024

	Service Retirements		Disability Retirements		Beneficiaries	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 20	0	0	0	0	1	54,497
20 - 24	0	0	0	0	2	50,732
25 - 29	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0
40 – 44	0	0	1	24,545	2	60,665
45 - 49	1	21,342	2	151,187	2	88,097
50 - 54	2	172,844	8	478,224	3	75,406
55 - 59	39	2,528,004	9	422,673	7	245,600
60 - 64	118	4,579,614	13	550,791	7	295,793
65 - 69	197	8,101,653	13	546,411	13	403,510
70 - 74	186	6,490,564	14	549,761	11	238,040
75 - 79	118	3,957,058	16	701,789	25	641,972
80 - 84	91	2,506,213	4	151,025	17	323,445
85 - 89	33	802,219	1	51,752	19	335,109
90 - 94	17	384,361	0	0	9	136,782
95 - 99	5	80,625	0	0	1	8,762
100 and over	1	3,330	0	0	1	8,620
Total	808	29,627,827	81	3,628,158	120	2,967,030

Schedule D - Projection of Expected Pension Payments

Year	Amount
2024	$ 41,708,455
2025	40,159,918
2026	41,660,886
2027	43,202,149
2028	44,836,565
2029	46,260,681
2030	47,705,939
2031	49,102,907
2032	50,435,755
2033	51,730,247
2034	52,822,013
2035	53,812,863
2036	54,712,345
2037	55,386,088
2038	55,907,970
2039	56,328,009
2040	56,659,145
2041	56,820,175
2042	56,919,285
2043	56,804,809
2044	56,611,592
2045	56,295,473
2046	56,005,635
2047	55,491,498
2048	55,015,221

Year	Amount
2049	$ 54,451,069
2050	53,890,995
2051	53,159,762
2052	52,475,456
2053	51,696,122
2054	50,988,320
2055	50,082,484
2056	49,168,776
2057	48,269,507
2058	47,085,864
2059	45,667,537
2060	44,237,522
2061	42,864,166
2062	41,337,589
2063	39,715,199
2064	38,023,215
2065	36,330,385
2066	34,615,864
2067	32,801,570
2068	31,013,404
2069	29,243,803
2070	27,504,722
2071	25,793,918
2072	24,098,494
2073	22,434,265

Schedule E – Risk Information

Funding future retirement benefits prior to when those benefits become due involves assumptions regarding future economic and demographic experience. These assumptions are applied to calculate actuarial liabilities and the corresponding funded status of the Plan. However, to the extent future experience deviates from the assumptions used, variations will occur in these calculated values. These variations create risk to the Plan. Understanding the risks to the funding of the Plan is important. Actuarial Standard of Practice No. 51 ("ASOP 51") requires certain disclosures of potential risks to the Plan and provides useful information for intended users of actuarial reports that determine Plan contributions or evaluate the adequacy of specified contribution levels to support benefit provisions.

Under ASOP 51, risk is defined as the potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience. It is important to note that not all risk is negative, but all risk should be understood and accepted based on knowledge, judgment and educated decisions. Future measurements may deviate in ways that produce positive or negative financial effects on the Plan.

In the actuary's professional judgment, the following risks may reasonably be anticipated to significantly affect the Plan's future financial condition.

- Investment risk – the risk that assets will not return as expected
- Longevity and other demographic risk – the risk that mortality or other demographic experience will be different from expected
- Contribution risk —the risk that actual future contributions deviate from expected future contributions, e.g., that actual contributions are not made in accordance with the plan's funding policy

The following information is provided to comply with ASOP 51 and furnish beneficial information on potential risks to the Plan. This list is not all-inclusive; it is an attempt to identify the most significant risks and how those risks might affect the results shown in this report.

Note that ASOP 51 does not require the actuary to evaluate the ability or willingness of the plan sponsor to make contributions to the plan when due, or to assess the likelihood or consequences of potential future changes in law. In addition, this valuation report is not intended to provide investment advice or to provide guidance on the management or reduction of risk. Gallagher welcomes the opportunity to assist in such matters as part of a separate project or projects utilizing the appropriate staff and resources for those objectives.

Investment Risk

Plan costs are very sensitive to the market return. Lower than assumed asset returns will increase costs:

- The lower market return will cause the market value of assets to be lower than expected.
- The plan uses an actuarial value of assets that smooths gains and losses on market returns over a five-year period to help control some of the volatility in costs due to investment risk.

The plan invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. However, Actuarial Standard of Practice No. 4 ("ASOP 4") requires the actuary to disclose a Low-Default-Risk Obligation Measure ("LDROM") of plan liabilities and provide commentary to help intended users of this report understand the significance of the measure with respect to funded status, contributions, and participant benefit security.

The LDROM is to be based on "discount rates derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future." The LDROM shown here represents what the plan's liability would be if the plan invested its assets solely in a portfolio of high-quality bonds whose cash flows approximately match future benefit payments. Consequently, the difference between the LDROM and the Actuarial Accrued Liability can be thought of as representing the expected taxpayer savings / (cost) from investing in the plan's diversified portfolio compared to investing only in high-quality bonds. It may also be thought of as the cost of reducing investment risk.

Schedule E – Risk Information (continued)

As of January 1, 2024, the LDROM is $724,192,888 and is based on a 5.19% interest rate. The interest rate used for the LDROM was determined by calculating a single equivalent discount rate using projected benefit payments and the Buck Above Median Yield Curve as of December 31, 2023. Note the interest rate used for the LDROM is based on bond yields applicable at the time of the measurement and will therefore vary for different measurement dates. All other assumptions are the same as those used for funding as shown in this report.

Actuaries play a role in helping determine funding methods and policies that can achieve affordable and appropriate contributions and risk management. The funded status based on Actuarial Accrued Liability and the Actuarially Determined Contributions are determined using the expected return on assets which reflects the actual investment portfolio. Since the assets are not invested in an all-bond portfolio, the LDROM does not indicate the plan's funded status or progress, nor does it provide information on necessary plan contributions.

With respect to security of participant benefits, if this plan were to be funded on an LDROM basis, participant benefits currently accrued as of the measurement date may be considered more secure as investment risk may be significantly reduced. However, the assets being invested in a diversified portfolio does not mean the participant benefits are not secure. Security of participant benefits relies on a combination of the assets in the plan, the investment returns generated on those assets, and the promise of future contributions from the plan sponsors. Reducing investment risk by investing solely in bonds may significantly increase Actuarially Determined Contributions and therefore increase contribution risk by decreasing the ability of the plan sponsor to make necessary contributions to fund the benefits. Unnecessarily high contribution requirements in the near term may not be affordable and could imperil plan sustainability and benefit security. Participant benefits will remain secure if reasonable and appropriate contributions with managed risk are calculated and paid.

Longevity and Other Demographic Risk

Plan costs will be increased as participants are expected to live longer. This is because:

- Benefits are paid over a longer lifetime when life expectancy is expected to increase. The longer duration of payments leads to higher liabilities.
- Health care has been improving which increases the life expectancy of participants. As health care improves, costs to the plan will increase.
- The mortality assumption for the Plan does assume future improvement in mortality. Any improvement in future mortality greater than that expected by the current mortality assumption would lead to increased costs for the Plan.

Contribution Risk

There is a risk associated with the employer's contribution when the actual amount and actuarially determined amount differ.

- When the actual contribution is lower than the actuarially determined contribution, the Plan may not be sustainable in the long term.
- Any underpayment of the contribution will increase future contribution amounts to help pay off the additional Unfunded Actuarial Accrued Liability associated with the underpayment.
- This risk is mitigated by the City's compliance with Section 22D of MGL Chapter 32, which outlines various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs.

Schedule E – Risk Information (continued)

Historical Information

The following shows selected historical values of key valuation measures. These items illustrate how actual volatility has impacted the Plan in recent years and gives additional context to the risks described above. Further information can be found in the actuarial valuation reports for each year.

Valuation Date	01/01/18	01/01/20	01/01/22	Current Valuation 01/01/24
Liabilities and Assets at Valuation Date				
• Actuarial Accrued Liability (AAL)	398,178,738	465,010,465	518,813,930	561,452,833
- Normal Cost	3,128,502	3,181,557	3,231,436	3,178,129
• Actuarial Value of Assets (AVA)	317,021,969	346,384,426	411,393,175	450,165,100
- Funded Percent (AVA)	80%	74%	79%	80%
• Market Value of Assets (MVA)	321,973,735	360,862,895	454,211,519	421,188,628
- Funded Percent (MVA)	81%	78%	88%	75%
Contributions and Disbursements for Plan Year Ended	2017	2019	2021	2023
• Actuarially Determined Contribution (ADC)	15,875,047	16,598,250	18,794,418	20,118,228
• Actual Contribution	15,875,047	16,598,250	18,794,418	20,118,228
• Disbursements	25,840,542	28,429,026	32,378,928	37,079,794
Rates of Return for Plan Year Ended	2017	2019	2021	2023
• Assumed	7.75%	7.75%	7.75%	7.60%
• AVA	8.28%	6.91%	11.77%	7.06%
• MVA	15.02%	20.33%	16.95%	11.08%
Maturity Measures at Valuation Date				
• Payroll	62,755,282	67,239,674	67,958,858	77,699,978
- Asset Volatility Ratio (MVA / Payroll)	5.1	5.4	6.7	5.4
- Liability Volatilty Ratio (AAL / Payroll)	6.3	6.9	7.6	7.2
• Retiree and Beneficiary (In-pay) Liability	231,752,902	272,106,771	325,377,129	365,477,492
- Percent of Total Liability	58%	59%	63%	65%
• Contributions minus Disbursements in Prior Year	(9,965,495)	(11,830,776)	(13,584,510)	(16,961,566)
- Percent Average Market Value of Assets	-3.4%	-3.5%	-3.3%	-3.9%

Schedule E – Risk Information (continued)

Plan Maturity Measures

There are certain measures that may aid in understanding the significant risks to the plan.

Contribution Volatility

Asset Volatility Ratio: Plans that have higher asset-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 10 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 5.

Liability Volatility Ratio: Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, if an assumption change increases the liability of two plans by the same percent the plan with a liability-to-payroll ratio of 10 may experience twice the contribution volatility than a plan with a liability-to-payroll ratio of 5.

Ratio of Retiree and Beneficiary Liability to Total Liability

A mature plan will often have a ratio above 60 - 65 percent. An increasing percentage may indicate a need for a less risky asset allocation which may lead to a lower long-term return on assets assumption and increased costs.

Ratio of Cash Flow to Assets (Contributions minus Disbursements)

When this cash flow ratio is negative more cash is being paid out than deposited in the fund. Negative cash flow means the fund needs to rely on investment returns to cover benefit payments and at the same time may need to invest in more liquid assets to cover the benefit payments. More liquid assets may not garner the same returns as less liquid assets and therefore increase the investment risk.

Schedule F – Breakouts

	Non-Light Subtotal	Total	City	GATRA	Landfill	Sewer	Water	Nursing Home	Light	Housing
1. Participants										
a. Actives	997	1,136	857	46	2	1	35	1	139	55
b. Inactives	243	248	171	17	0	0	4	47	5	4
c. Retirees and Beneficiaries	763	928	670	7	0	4	26	39	165	17
d. Disabled Retirees	72	81	57	0	0	0	5	9	9	1
e. Total	2,075	2,393	1,755	70	2	5	70	96	318	77
2. Payroll of Active Participants	$ 61,782,431	$ 77,560,724	$ 52,543,927	$ 2,189,250	$ 155,391	$ 73,766	$ 2,492,435	$ 3,720	$ 15,778,293	$ 4,323,942
Percent of Total Payroll	79.66%	100.00%	67.75%	2.82%	0.20%	0.10%	3.21%	0.00%	20.34%	5.57%
3. Normal Cost										
a. Total Normal Cost	$ 7,532,859	$ 9,789,442	$ 6,607,585	$ 229,647	$ 18,754	$ 9,960	$ 248,105	$ 96	$ 2,256,583	$ 418,712
b. Expected Employee Contributions	5,690,470	7,211,313	4,838,544	197,738	14,242	6,591	228,916	294	1,520,843	404,145
c. Administrative Expenses	477,941	600,000	406,473	16,936	1,202	571	19,281	29	122,059	33,449
d. Net Employer Normal Cost [a. - b. + c.]	$ 2,320,330	$ 3,178,129	$ 2,175,514	$ 48,845	$ 5,714	$ 3,940	$ 38,470	$ (169)	$ 857,799	$ 48,016
4. Actuarial Accrued Liability	$416,792,112	$561,452,833	$367,064,169	$ 6,428,025	$ 72,446	$ 474,270	$ 15,311,835	$ 10,810,970	$144,660,721	$ 16,630,397
5. Assets*	$334,178,139	$450,165,100	$294,306,964	$ 5,153,901	$ 58,086	$ 380,263	$ 12,276,817	$ 8,668,086	$115,986,961	$ 13,334,022
6. Unfunded Actuarial Accrued Liability [4. - 5.]	$ 82,613,973	$111,287,733	$ 72,757,205	$ 1,274,124	$ 14,360	$ 94,007	$ 3,035,018	$ 2,142,884	$ 28,673,760	$ 3,296,375
7. Amortizations										
a. Unfunded Actuarial Accrued Liability	$ 11,372,670	$ 15,319,910	$ 10,015,784	$ 175,396	$ 1,977	$ 12,941	$ 417,802	$ 294,990	$ 3,947,240	$ 453,780
c. Holiday	148,345	202,848	138,297	0	27	179	5,769	4,073	54,503	0
8. Total Required Employer Contributions [3.b. + 7.	$ 13,841,345	$ 18,700,887	$ 12,329,595	$ 224,241	$ 7,718	$ 17,060	$ 462,041	$ 298,894	$ 4,859,542	$ 501,796
9. Fiscal 2025 Cost	$ 15,431,907	$ 20,943,987	$ 13,813,750	$ 225,875	$ 6,117	$ 20,698	$ 478,727	$ 365,329	$ 5,512,080	$ 521,411
Percentage of total	73.68%	100.00%	65.96%	1.08%	0.03%	0.10%	2.29%	1.74%	26.32%	2.49%
10. Fiscal 2026 Cost	$ 15,225,166	$ 20,644,429	$ 13,617,259	$ 237,037	$ 8,375	$ 19,074	$ 493,436	$ 329,611	$ 5,419,263	$ 520,374
Percentage of total	73.75%	100.00%	65.96%	1.15%	0.04%	0.09%	2.39%	1.60%	26.25%	2.52%
11. Fiscal 2027 Cost	$ 15,665,986	$ 21,237,067	$ 14,000,271	$ 246,463	$ 8,544	$ 19,594	$ 508,179	$ 339,710	$ 5,571,081	$ 543,225
12. Fiscal 2028 Cost	$ 16,296,101	$ 22,087,989	$ 14,558,410	$ 256,258	$ 8,745	$ 20,339	$ 530,266	$ 355,004	$ 5,791,888	$ 567,079
13. Fiscal 2029 Cost	$ 16,951,204	$ 22,972,490	$ 15,138,429	$ 266,435	$ 8,947	$ 21,112	$ 553,315	$ 370,987	$ 6,021,286	$ 591,979
14. Fiscal 2030 Cost	$ 17,632,268	$ 23,891,868	$ 15,741,174	$ 277,009	$ 9,149	$ 21,912	$ 577,363	$ 387,690	$ 6,259,600	$ 617,971

* Allocation is based on the ratio of the Actuarial Accrued Liability

Schedule F – Breakouts (continued)

Appropriation Forecast for Municipal Light Plan

Fiscal Year Ending	Employer Normal Cost with Interest	Amortization Payments with Interest	Amortization Holiday Amortization	Employer Total Cost with Interest
2026	1,005,138	4,353,412	60,713	5,419,263
2027	1,021,765	4,549,316	0	5,571,081
2028	1,037,852	4,754,036	0	5,791,888
2029	1,053,318	4,967,968	0	6,021,286
2030	1,068,075	5,191,525	0	6,259,600
2031	1,082,026	5,425,143	0	6,507,169
2032	1,095,070	5,669,275	0	6,764,345
2033	1,107,098	0	0	1,107,098
2034	1,117,991	0	0	1,117,991
2035	1,127,621	0	0	1,127,621
2036	1,135,854	0	0	1,135,854
2037	1,186,968	0	0	1,186,968
2038	1,240,381	0	0	1,240,381
2039	1,296,200	0	0	1,296,200
2040	1,354,528	0	0	1,354,528
2041	1,415,482	0	0	1,415,482

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