

City of Newburyport Other Postemployment Benefits Plan

GASB 74 & GASB 75 Actuarial Valuation

With a Valuation Date of July 1, 2022

As of the Measurement Date:
June 30, 2023

For the Reporting Date:
June 30, 2023

Delivered November 14, 2023



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November 14, 2023

Personal and Confidential

Mr. Ethan Manning
Finance Director/City Auditor
City of Newburyport
60 Pleasant Street
Newburyport, MA 01950

Dear Mr. Manning:

We have performed an actuarial valuation of the City of Newburyport Other Postemployment Benefits Plan for the Reporting Date & Fiscal Year Ending June 30, 2023 with a Measurement Date of June 30, 2023 and a Valuation Date of July 1, 2022. The figures presented in this report reflect the adoption, by the City of Newburyport, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75").

The financial results of the actuarial valuation are summarized in the report. The Executive Summaries highlight the results of the valuation. Additional information summarizing census data, actuarial assumptions, claim rates and the methodology for developing them, as well as a glossary of selected terms used in this study, is also included in the report.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions used are reasonable, reflecting the experience of the plan and reasonable expectations and, in combination, represent our best estimate of the anticipated experience under the plan.

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

Very truly yours,



Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

November 14, 2023

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the City of Newburyport other postemployment benefit programs with a Valuation Date of July 1, 2022 with a Measurement Date of June 30, 2023 for the Reporting Date & Fiscal Year Ending June 30, 2023 in accordance with Government Account Standards Board Statement No. 74 & 75 and Actuarial Standards of Practice as issued by the American Academy of Actuaries. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Numbers 74 & 75 for the determination of the liability for postemployment benefits other than pensions.

The actuarial data is based on the plan benefits verified by the City and on participant claims or premium data provided by the City and/or vendors employed by the City.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes including determining the benefit security at termination and/or adequacy of the funding of an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion represents the information necessary to comply with GASB Statements Number 74 and 75 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the City are reasonably related to the experience and expectations of the postemployment benefits programs.



Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

EXECUTIVE SUMMARY

How did plan liabilities change from FY 22 to FY 23?

Plan Experience

For the year ending on the Measurement Date of June 30, 2023, the Plan saw an experience gain of \$11,283,294 or 12.46% of the beginning Total OPEB Liability ("TOL"). This was mainly due to the average premium for Medicare Supplement plans increasing 2% vs the expected 9% increase over the 2-year period as well as higher than expected turnover.

Assumption Changes

Two key assumptions have changed since the prior valuation. The total impact of these assumption changes increased disclosed liabilities by approximately \$650 thousand, as detailed below.

- ✓ Due to the GASB 75 standards the discount rate has been changed from 5.12% to 5.35% decreasing the disclosed liability by approximately \$2.4 million.
- ✓ Based on ongoing actuarial research, we have modified our assumption for future increases in healthcare costs using the Getzen model to reflect higher costs in the near-term increasing the disclosed liability by approximately \$3.0 million.

It is important to remember that actuarial assumptions or changes in such do not impact the actual cost of the Plan. Rather, they impact the timing of the recognition of such costs.

Investment Experience

- ✓ During the period investments earned approximately \$11 thousand less than expected.

Changes in Benefit Terms

- ✓ To the best of our knowledge there have been no material changes in benefit terms that would impact the figures shown in this report.

EXECUTIVE SUMMARY

Recognition Period

- ✓ Changes in assumptions & plan experience are amortized into the net OPEB expense over 5.00 years.
- ✓ Differences between projected & actual earnings on OPEB plan investments are amortized into the net OPEB expense over 5.00 years
- ✓ Changes in benefit terms are to be recognized in full immediately

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare supplement) plans – represent 76.97% of the total plan liabilities
- ✓ Age at which plan participants retire
- ✓ Percentage of plan participants who elect coverage for themselves and/or a spouse
- ✓ Medical care cost inflation rate – We currently assume medical costs increase according to the Getzen Model of Long-Run Medical Cost Trends for Active and Medicare supplement plans, which includes an assumed 9.00% increase in fiscal year 2023 and an ultimate trend rate of 3.63% in fiscal year 2060.
- ✓ Discount Rate (5.35%) – Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing – Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance

EXECUTIVE SUMMARY

Discount Rate Determinants

- ✓ Employer Current and Future Benefit Payments
- ✓ Municipal Bond Rate – The S&P 20-year high grade municipal bond index was 4.13% as of June 30, 2023.
- ✓ Current Asset Level – The City had \$1,346,232 of OPEB assets as of June 30, 2023.
- ✓ Future Funding Policy – The City is expected to contribute 1% of annual health insurance spending above pay-as-you-go costs until their pension system is fully funded, at which point the City will reallocate the funds used to pay its pension amortization towards OPEB.
- ✓ Investment Policy – The City is expected to earn 6.30% per year on assets based on its investment policy.

Low Default Risk Obligation Measure (LDRM)

For purposes of this LDRM, we have used a discount rate of 4.13% which represents the 20-year municipal bond index while keeping all other assumptions unchanged from the GASB 74/75 disclosures. Based on this, the LDRM Total OPEB Liability is \$99.2 million vs. the \$83.5 million under the GASB 74/75 measure - the reflection of the City's funding and OPEB Trust Investment policy reduced disclosed liabilities by approximately \$16 million. Please note that the ultimate cost of the plan is the actual benefits paid plus expenses and any changes in assumptions, including discount rate, do not impact the actual cost of the plan.

EXECUTIVE SUMMARY

Medicare Buy-In

The City currently has 2 retirees or covered spouses who are over the age of 65 and are enrolled in Active medical plans rather than Medicare Supplement (Senior) plans. Under Actuarial Standards of Practice for OPEB, we are required to reflect the projected higher healthcare costs that occur as retirees age.

Recently, some of our clients have seen substantial cost savings by “buying into” Medicare for retirees who would otherwise be ineligible. To buy into Medicare the City would need to pay the Medicare Part A premium and the Medicare Part A and B penalties. While the cost to buy into Medicare is significant, it is likely still far less than the cost of the claims that the associated retirees are expected to incur. You may wish to review their Medicare eligibility to see if they are already eligible for Medicare or if a “buy-in” is appropriate as this could yield a reduction in your OPEB annual costs and disclosed liabilities. If you are in this situation, we encourage you to talk to your healthcare consultant to see if this might be viable.

EXECUTIVE SUMMARY

Key Plan Metrics

While an actuarial valuation under GASB 74/75 can be very complex with many variables, we find it helpful to look at several key metrics (shown below) to better allow you to manage your plan.

Representative Plan Statistics		
Valuation Date	July 1, 2022	July 1, 2020
Measurement Date & Period Ending	June 30, 2023	June 30, 2022
Reporting Date/Fiscal Year End	June 30, 2023	June 30, 2022
Total OPEB Liability	83,514,065	90,558,732
Per Eligible Active Plan Participant	69,258	78,757
Per Retiree/Spouse Plan Participant	73,971	84,618
Total Annual Service Cost (Annual Benefit Accrual)	2,382,209	2,821,835
Per Eligible Active Plan Participant	3,892	4,791
Expected Employer Share of Retiree Costs	3,466,575	3,355,909
Per Retiree/Spouse Plan Participant	6,235	6,429
Net OPEB Liability as a % of Covered Payroll	177.59%	216.04%

EXECUTIVE SUMMARY

Liabilities & Benefit Payments in Today's Dollars

With the growth of medical care costs over time, the nominal accrued liabilities ("TOL") and benefit payments can appear daunting. However, it is important to remember that a dollar paid in the future is worth less than a dollar paid today.

For the Period Ending on the Measurement Date of:	Number of Retirees, Spouses, & Surviving Spouses	Total OPEB Liability	Present Value at 3.00% of Total OPEB Liability	Employer Share of Premiums/Claims Including "Implicit Cost"	Present Value at 3.00% of Employer Share of Premiums / Claims Including "Implicit Cost"
June 30, 2023	549	83,514,065	83,514,065	3,466,575	3,466,575
June 30, 2028	616	100,671,551	86,840,164	4,016,816	3,464,941
June 30, 2033	630	119,356,687	88,812,584	5,078,779	3,779,089
June 30, 2038	624	138,917,795	89,166,046	6,450,108	4,140,079
June 30, 2043	590	161,324,554	89,321,494	7,137,363	3,951,785
June 30, 2048	554	189,314,209	90,417,521	8,204,426	3,918,480
June 30, 2053	527	222,426,127	91,636,619	9,290,616	3,827,611

EXECUTIVE SUMMARY

Continuing OPEB Disclosures

In addition to pension benefits, municipal entities may provide retired employees with healthcare and life insurance benefits. The portion of the cost of such benefit paid by these entities is generally provided on a pay-as-you-go basis.

The pay-as-you-go costs to the City for such benefits for the most recent years is as follows:

<u>Fiscal Year Ending</u>	<u>Cost</u>
June 30, 2024 (Projected)	3,193,221
June 30, 2023	3,466,575
June 30, 2022	3,355,909
June 30, 2021	3,163,792
June 30, 2020	2,876,909
June 30, 2019	2,782,475

The City performs actuarial valuations of its non-pension post-employment benefits liability in accordance with GASB reporting requirements. As of the June 30, 2023 Measurement Date the Net OPEB Liability ("NOL") was determined to be \$82,167,833 assuming a discount rate of 5.35%. The City has established an OPEB Trust and plans to fund this liability. The City is expected to contribute 1% of annual health insurance spending above pay-as-you-go costs until their pension system is fully funded, at which point the City will reallocate the funds used to pay its pension amortization towards OPEB. The balance of this fund as of June 30, 2023 was \$1,346,232. See the City's audit reports for additional information.

PRINCIPAL RESULTS OF THE VALUATION

City of Newburyport
Assuming Funding - 5.35% discount rate
Comparison of Plan Liabilities to Prior Valuation

Valuation Date	July 1, 2022	July 1, 2020
For the Measurement Period ending on the Measurement Date of:	June 30, 2023	June 30, 2022
For the Reporting Period & Fiscal Year ending on:	June 30, 2023	June 30, 2022
I. Total OPEB Liability		
A. Actives	42,385,924	46,388,106
B. Retirees/Disabled	<u>41,128,141</u>	<u>44,170,626</u>
C. Total	83,514,065	90,558,732
II. Fiduciary Net Position [Plan Assets]	1,346,232	1,178,780
III. Net OPEB Liability (Asset) [I. - II.]	82,167,833	89,379,952
IV. Funded Ratio [II. / I.]	1.61%	1.30%
V. Number of Eligible Participants		
A. Actives	612	589
B. Retirees/Disabled & Dependents	<u>556</u>	<u>522</u>
C. Total	1,168	1,111
VI. Service Cost	2,382,209	2,821,835
VII. Financial Statement Expense/(Income)	5,086,596	7,135,784
VIII. Employer OPEB Trust (Contribution)/Withdrawal	(100,000)	(100,000)
IX. Deferred Inflow of Resources	(15,216,487)	(10,050,407)
X. Deferred Outflow of Resources	4,259,291	7,825,351
XI. Money Weighted Rate of Return	5.72%	5.67%
XII. 20-year Municipal Bond Rate (SAPIHG)	4.13%	4.09%
XIII. Expected Long Term Rate of Return (Net of Expense)	6.30%	6.41%
XIV. Crossover Year	Immediate	Immediate
XV. Discount Rate	5.35%	5.12%

PRINCIPAL RESULTS OF THE VALUATION

**City of Newburyport
Plan Liabilities as of the June 30, 2023 Measurement Date**

	General Government Employees and Retirees	School Employees and Retirees	Water Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Total
I. Total OPEB Liability					
A. Actives	15,048,345	24,991,399	896,676	1,449,504	42,385,924
B. Retirees/Disabled	<u>16,565,398</u>	<u>23,668,969</u>	<u>666,783</u>	<u>226,991</u>	<u>41,128,141</u>
C. Total	31,613,743	48,660,368	1,563,459	1,676,495	83,514,065
II. Fiduciary Net Position [Plan Assets]	509,607	784,397	25,203	27,025	1,346,232
III. Net OPEB Liability (Asset) [I. - II.]	31,104,136	47,875,971	1,538,256	1,649,470	82,167,833
For the Reporting Date and Fiscal Year Ending June 30, 2023					
IV. Service Cost	701,589	1,548,267	76,149	56,204	2,382,209
V. Financial Statement Expense/(Income)	1,717,231	3,130,405	127,498	111,462	5,086,596
VI. Employer Share of Costs	(1,403,392)	(1,942,994)	(69,029)	(51,160)	(3,466,575)
VII. Employer OPEB Trust (Contribution)/Withdrawal	(37,855)	(58,266)	(1,872)	(2,007)	(100,000)
VIII. Total Employer Contribution [VI. + VII.]	(1,441,247)	(2,001,260)	(70,901)	(53,167)	(3,566,575)

PRINCIPAL RESULTS OF THE VALUATION
CURRENT FUNDING POLICY (OPEN GROUP)

Funding - 5.35% discount rate

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with an expected 6.30% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [III. / I.]	V. Service Cost	VI. Employer	VII. Trust	VIII. Gross	IX. Benefit	X. Administrative	XI. Total Employer
							Share of Benefit Payments (With Implicit Cost)	Contributions Beyond Pay-as-you-go	Trust Contributions [VI. + VII.]	Payments Reimbursed from the Trust	& Investment Expenses Reimbursed from the Trust	Payments Less Reimbursements [VIII. - IX. - X.]
2023	June 30, 2023	83,514,065	1,346,232	82,167,833	1.61%	2,382,209	3,466,575	100,000	3,566,575	3,466,575	0	100,000
2024	June 30, 2024	87,004,042	1,534,147	85,469,895	1.76%	2,182,725	3,193,221	100,000	3,293,221	3,193,221	0	100,000
2025	June 30, 2025	90,332,487	1,733,900	88,598,587	1.92%	2,268,733	3,391,542	100,000	3,491,542	3,391,542	0	100,000
2026	June 30, 2026	93,718,507	1,946,238	91,772,269	2.08%	2,349,525	3,594,774	100,000	3,694,774	3,594,774	0	100,000
2027	June 30, 2027	97,163,615	2,171,953	94,991,662	2.24%	2,433,261	3,806,832	100,000	3,906,832	3,806,832	0	100,000
2028	June 30, 2028	100,671,551	2,411,888	98,259,663	2.40%	2,513,185	4,016,816	100,000	4,116,816	4,016,816	0	100,000
2029	June 30, 2029	104,268,972	2,666,939	101,602,033	2.56%	2,586,637	4,178,388	100,000	4,278,388	4,178,388	0	100,000
2030	June 30, 2030	107,945,725	2,938,058	105,007,667	2.72%	2,671,696	4,385,919	100,000	4,485,919	4,385,919	0	100,000
2031	June 30, 2031	111,696,049	3,226,258	108,469,791	2.89%	2,764,533	4,607,749	100,000	4,707,749	4,607,749	0	100,000
2032	June 30, 2032	115,511,395	3,532,614	111,978,781	3.06%	2,851,849	4,818,566	100,000	4,918,566	4,818,566	0	100,000
2033	June 30, 2033	119,356,687	3,858,271	115,498,416	3.23%	2,919,842	5,078,779	100,000	5,178,779	5,078,779	0	100,000
2034	June 30, 2034	123,193,405	4,204,444	118,988,961	3.41%	3,013,787	5,346,905	100,000	5,446,905	5,346,905	0	100,000
2035	June 30, 2035	127,048,245	4,572,426	122,475,819	3.60%	3,110,018	5,607,137	100,000	5,707,137	5,607,137	0	100,000
2036	June 30, 2036	130,942,831	4,963,591	125,979,240	3.79%	3,209,364	5,847,581	100,000	5,947,581	5,847,581	0	100,000
2037	June 30, 2037	134,950,366	5,379,399	129,570,967	3.99%	3,308,678	6,120,305	100,000	6,220,305	6,120,305	0	100,000
2038	June 30, 2038	138,917,795	13,347,841	125,569,954	9.61%	3,414,115	6,450,108	7,400,000	13,850,108	6,450,108	0	7,400,000
2039	June 30, 2039	143,079,760	21,818,295	121,261,465	15.25%	3,523,759	6,648,709	7,400,000	14,048,709	6,648,709	0	7,400,000
2040	June 30, 2040	147,386,711	30,822,388	116,564,323	20.91%	3,635,108	6,856,593	7,400,000	14,256,593	6,856,593	0	7,400,000
2041	June 30, 2041	151,736,473	40,393,738	111,342,735	26.62%	3,752,628	7,021,512	7,400,000	14,421,512	7,021,512	0	7,400,000
2042	June 30, 2042	156,471,094	50,568,083	105,903,011	32.32%	3,874,644	7,141,517	7,400,000	14,541,517	7,141,517	0	7,400,000
2043	June 30, 2043	161,324,554	61,383,412	99,941,142	38.05%	4,002,294	7,137,363	7,400,000	14,537,363	7,137,363	0	7,400,000
2044	June 30, 2044	166,558,975	72,880,107	93,678,868	43.76%	4,131,355	7,266,961	7,400,000	14,666,961	7,266,961	0	7,400,000
2045	June 30, 2045	171,919,849	85,101,094	86,818,755	49.50%	4,274,052	7,420,531	7,400,000	14,820,531	7,420,531	0	7,400,000
2046	June 30, 2046	177,431,773	98,092,003	79,339,770	55.28%	4,423,305	7,636,138	7,400,000	15,036,138	7,636,138	0	7,400,000
2047	June 30, 2047	183,294,434	111,901,339	71,393,095	61.05%	4,581,892	7,904,131	7,400,000	15,304,131	7,904,131	0	7,400,000
2048	June 30, 2048	189,314,209	126,580,663	62,733,546	66.86%	4,750,643	8,204,426	7,400,000	15,604,426	8,204,426	0	7,400,000
2049	June 30, 2049	195,378,689	142,184,785	53,193,904	72.77%	4,925,463	8,461,358	7,400,000	15,861,358	8,461,358	0	7,400,000
2050	June 30, 2050	201,801,936	158,771,966	43,029,970	78.68%	5,109,245	8,640,038	7,400,000	16,040,038	8,640,038	0	7,400,000
2051	June 30, 2051	208,605,392	176,404,140	32,201,252	84.56%	5,305,559	8,808,584	7,400,000	16,208,584	8,808,584	0	7,400,000
2052	June 30, 2052	215,662,208	195,147,141	20,515,067	90.49%	5,508,954	9,055,871	7,400,000	16,455,871	9,055,871	0	7,400,000
2053	June 30, 2053	222,426,127	215,070,951	7,355,176	96.69%	5,719,939	9,290,616	7,400,000	16,690,616	9,290,616	0	7,400,000

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements:

1. OPEB Expense Development

Components of the City's OPEB Expenses for the Fiscal Year Ending June 30, 2023	
Description	Amount
I. Service Cost	2,382,209
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	4,670,940
III. Deferred (Inflows)/Outflows from Plan Experience*	(4,164,941)
IV. Deferred (Inflows)/Outflows from Changes of Assumptions*	2,276,912
V. Projected Earnings on OPEB Plan Investments	(78,732)
VI. Deferred (Inflows)/Outflows from Earnings on Plan Investments**	208
VII. OPEB Plan Administrative Expense	0
VIII. Other Changes in Fiduciary Net Position	0
IX. Financial Statement Expense/(Income) Prior to Plan Design Changes [I. + II.+ ... + VII. + VIII.]	5,086,596
X. Expense Related to Change in Benefit Terms***	0
XI. Financial Statement Expense/(Income) [IX. + X.]	5,086,596

* Amortized over 5.00 years

** Amortized over 5.00 years

*** Recognized Immediately

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

2. Changes in Net OPEB Liability

Changes in Net OPEB Liability				
		Increase (Decrease)		
		Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
I.	Balances for the June 30, 2022 Reporting Date	90,558,732	1,178,780	89,379,952
II.	Prior Period Adjustment	0	0	0
III.	Balances for the June 30, 2022 Reporting Date with Adjustment [I. + II.]	90,558,732	1,178,780	89,379,952
Changes for the year:				
IV.	Service Cost	2,382,209	0	2,382,209
V.	Interest on Total OPEB Liability, Service Cost, and Benefit Payments	4,670,940	0	4,670,940
VI.	Changes in Benefit Terms *	0	0	0
VII.	Change in Assumptions **	652,053	0	652,053
VIII.	Differences Between Actual and Expected Experience **	(11,283,294)	0	(11,283,294)
IX.	Net Investment Income	0	67,452	(67,452)
X.	Employer Contributions to Trust	0	3,566,575	(3,566,575)
XI.	Benefit Payments Withdrawn from Trust	0	(3,466,575)	3,466,575
XII.	Benefit Payments Excluding Implicit Cost	(2,956,460)	0	(2,956,460)
XIII.	Implicit Cost Amount	(510,115)	0	(510,115)
XIV.	Total Benefit Payments Including Implicit Cost [XII. + XIII.]	(3,466,575)	0	(3,466,575)
XV.	Administrative Expense	0	0	0
XVI.	Other Charges	0	0	0
XVII.	Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	(7,044,667)	167,452	(7,212,119)
XVIII.	Balances for the June 30, 2023 Reporting Date [III.+XVII.]	83,514,065	1,346,232	82,167,833

* Recognized Immediately

** Amortized over 5.00 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

3. Changes in Net OPEB Expense

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected & Actual Experience									
Fiscal Year	Differences			2023	2024	2025	2026	2027	2028
	Between Actual & Expected Experience	Recognition Period (Years)	Remaining Balance						
2017									
2018	0	5.13	0	0					
2019	(9,654,268)	5.16	(299,358)	(1,870,982)	(299,358)				
2020	(75,075)	5.16	(16,879)	(14,549)	(14,549)	(2,330)			
2021	(113,761)	5.00	(45,505)	(22,752)	(22,752)	(22,753)			
2022	0	5.00	0	0	0	0	0		
2023	(11,283,294)	5.00	(9,026,636)	(2,256,658)	(2,256,658)	(2,256,658)	(2,256,658)	(2,256,662)	
2024									
2025									
2026									
Total Remaining Balance			(9,388,378)						
Net increase (decrease) in OPEB Expense				(4,164,941)	(2,593,317)	(2,281,741)	(2,256,658)	(2,256,662)	0

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Changes in Assumptions									
Fiscal Year	Differences from Changes in			2023	2024	2025	2026	2027	2028
	Actuarial Assumptions	Recognition Period (years)	Remaining Balance						
2017									
2018	0	5.13	0	0					
2019	8,642,414	5.16	267,984	1,674,886	267,984				
2020	8,329,553	5.16	1,872,537	1,614,254	1,614,254	258,283			
2021	3,992,816	5.00	1,597,127	798,563	798,563	798,564			
2022	(9,706,008)	5.00	(5,823,606)	(1,941,201)	(1,941,201)	(1,941,201)	(1,941,204)		
2023	652,053	5.00	521,643	130,410	130,410	130,410	130,410	130,413	
2024									
2025									
2026									
Total Remaining Balance			(1,564,315)						
Net increase (decrease) in OPEB Expense				2,276,912	870,010	(753,944)	(1,810,794)	130,413	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Defered (Inflows)/Outflows in OPEB Expense Arising from the Recognition of Differences Between Projected & Actual Earnings on OPEB Plan Investments									
Fiscal Year	Differences			2023	2024	2025	2026	2027	2028
	Between Actual & Expected Earnings	Recognition Period (years)	Remaining Balance						
2017									
2018	(31,885)	5.00	0						
2019	11,405	5.00	0	2,281					
2020	39,007	5.00	7,803	7,801	7,803				
2021	(75,268)	5.00	(30,106)	(15,054)	(15,054)	(15,052)			
2022	14,624	5.00	8,776	2,924	2,924	2,924	2,928		
2023	11,280	5.00	9,024	2,256	2,256	2,256	2,256	2,256	
2024									
2025									
2026									
Total Remaining Balance			(4,503)						
Net increase (decrease) in OPEB Expense				208	(2,071)	(9,872)	5,184	2,256	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Statement of (Inflows) & Outflows Arising from Current & Prior Reporting Periods for the Measurement Period Ending on June 30, 2023 to be Reported for the Fiscal Year Ending June 30, 2023			
	Deferred Outflows of Resources	Deferred Inflows of Resources	Total
I. Contributions Made Subsequent to the Measurement Date	0	0	0
II. Differences Between Actual & Expected Experience	0	(9,388,378)	(9,388,378)
III. Changes of Assumptions	4,259,291	(5,823,606)	(1,564,315)
IV. Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	0	(4,503)	(4,503)
VI. Total [I. + II. + III. + IV.]	4,259,291	(15,216,487)	(10,957,196)

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Annual Amortization of Deferred (Inflows) & Outflows	
The balance of deferred (inflows) & outflows as of the Reporting Date of June 30, 2023 will be recognized in future years as shown below.	
Year ending June 30:	
2024	(1,725,378)
2025	(3,045,557)
2026	(4,062,268)
2027	(2,123,993)
2028	0
Thereafter	0

4. Discount Rate

The discount rate used to measure the Total OPEB liability was 5.35% as of June 30, 2023 and 5.12% as of June 30, 2022. The projection of cash flows used to determine the discount rate assumed that contributions will be made in accordance with the City’s funding policy. Based on these assumptions, the OPEB Plan’s Fiduciary Net Position is projected to be insufficient to make all projected benefit payments to current plan members. Therefore, the long-term expected rate of return on the OPEB Plan assets is applied to the projected benefits payments which the Fiduciary Net Position is expected to be sufficient to cover and the Municipal Bond Rate is applied thereafter. The Municipal Bond Rate is based on the S&P Municipal Bond 20 – Year High Grade Index ("SAPIHG"), which was 4.13% as of June 30, 2023. The S&P Municipal Bond 20 - Year High Grade Index is the index rate for 20 – Year, tax exempt general obligation municipal bonds with an average rate of AA/Aa or higher.

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

5. Funding Policy

The contribution requirements of plan members and the City are established and may be amended through City ordinances. For the period ending on the June 30, 2023 Measurement Date, total City premiums plus implicit costs for the retiree medical program were \$3,466,575. The City also contributed \$100,000 to an OPEB Trust for a total contribution during the measurement period of \$3,566,575 to be reported on the financial statement for the fiscal year ending June 30, 2023.

6. Investment Policy

The chart below shows how the long-term rate of return on assets is developed based on the City's Investment Policy.

Investment Target Allocation & Expected Long-Term Real Rate of Return			
Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return*
Domestic Equity - Large Cap	14.50%	Domestic Equity - Large Cap	4.10%
Domestic Equity - Small/Mid Cap	3.50%	Domestic Equity - Small/Mid Cap	4.55%
International Equity - Developed Market	16.00%	International Equity - Developed Market	4.64%
International Equity - Emerging Market	6.00%	International Equity - Emerging Market	5.45%
Domestic Fixed Income	20.00%	Domestic Fixed Income	1.05%
International Fixed Income	3.00%	International Fixed Income	0.96%
Alternatives	23.00%	Alternatives	5.95%
Real Estate	14.00%	Real Estate	6.25%
Cash	0.00%	Cash	0.00%
Total	<u>100.00%</u>		
		I. Real Rate of Return	<u>4.30%</u>
		II. Inflation Assumption	2.50%
		III. Total Nominal Return [I. + II.]	6.80%
		IV. Investment Expense	0.50%
		V. Net Investment Return* [III.-IV.]	<u>6.30%</u>

* Mean Geometric Returns based on 2022 Horizon Survey of Capital Market Assumptions

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2023 Measurement Date)

7. Schedule of The City's Contributions

For the Fiscal Year Ending	Actuarial Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
June 30, 2023	6,109,506	(3,566,575)	2,542,931	46,268,736	7.71%
June 30, 2022	6,763,549	(3,455,909)	3,307,640	41,372,226	8.35%
June 30, 2021	6,917,027	(3,263,792)	3,653,235	40,167,210	8.13%
June 30, 2020	7,819,663	(2,876,909)	4,942,754	39,836,189	7.22%
June 30, 2019	6,919,837	(2,842,475)	4,077,362	38,675,912	7.35%
June 30, 2018	7,329,686	(2,706,780)	4,622,906	41,172,059	6.57%
June 30, 2017	7,217,226	(2,482,447)	4,734,779	39,972,872	6.21%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

8. Effect of 1% Change in Healthcare Trend

<u>Impact of a 1% Change in the Healthcare Trend Rate on NOL as of the June 30, 2023 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Trend Rate</u>	<u>1% Increase</u>
Net OPEB Liability (Asset)	70,943,433	82,167,833	96,266,733

9. Effect of 1% Change in Discount Rates

<u>Impact of a 1% Change in the Discount Rate on NOL as of the June 30, 2023 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Net OPEB Liability (Asset)	94,846,048	5.35%	71,989,344

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

10. Money Weighted Rate of Return

	Plan Investments / Net External Cash Flows	Periods Invested	Period Weight
I. Beginning value - June 30, 2022	1,178,780	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	0	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
<u>June</u>	<u>100,000</u>	0	0.0000
II. Total net external cash flow	100,000		
III. Earnings and increase in fair value	67,452		
IV. Ending value - June 30, 2023 [I.+II.+III.]	1,346,232		
V. Receivable Contributions	0		
Plan Asset Value - June 30, 2023 [IV.+V.]	1,346,232		
Money Weighted Rate of Return	5.72%		

EXHIBIT A
FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2023 Measurement Date)

11. OPEB Liability, OPEB Expense

	Fiscal Year Ending June 30, 2023				Total
	General Government Employees and Retirees	School Employees and Retirees	Water Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	
I. Total OPEB Liability as of June 30, 2023	31,613,743	48,660,368	1,563,459	1,676,495	83,514,065
II. Fiduciary Net Position as of June 30, 2023	<u>509,607</u>	<u>784,397</u>	<u>25,203</u>	<u>27,025</u>	<u>1,346,232</u>
III. Net OPEB Liability (Asset) as of June 30, 2023 [I. - II.]	31,104,136	47,875,971	1,538,256	1,649,470	82,167,833
IV. Service Cost	701,589	1,548,267	76,149	56,204	2,382,209
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	1,760,063	2,727,975	88,165	94,737	4,670,940
VI. Projected Earnings on OPEB Plan Investments	(29,798)	(45,878)	(1,474)	(1,582)	(78,732)
VII. Net Recognition of Deferred (Inflows)/Outflows	(714,623)	(1,099,959)	(35,342)	(37,897)	(1,887,821)
VIII. OPEB Plan Administrative Expense	0	0	0	0	0
IX. Expense Related to Change in Benefit Terms	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
X. Financial Statement Expense/(Income) [IV. + V. + ... + VIII. + IX.]	1,717,231	3,130,405	127,498	111,462	5,086,596
XI. Employer Share of Costs	(1,403,392)	(1,942,994)	(69,029)	(51,160)	(3,466,575)
XII. Employer (Payments) Withdrawals to/from OPEB Trust	(37,855)	(58,266)	(1,872)	(2,007)	(100,000)
XIII. Total Employer Contribution [XI. + XII.]	<u>(1,441,247)</u>	<u>(2,001,260)</u>	<u>(70,901)</u>	<u>(53,167)</u>	<u>(3,566,575)</u>
XIV. Net OPEB Expense/(Income) [X. + XIII.]	275,984	1,129,145	56,597	58,295	1,520,021

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2023 Measurement Date)

12. OPEB Liability, OPEB Expense and Deferred Inflow/Outflow

Valuation Date	July 1, 2022
For the Measurement Period ending on the Measurement Date of:	June 30, 2023
For the Reporting Period & Fiscal Year ending on:	June 30, 2023

Source of Deferred Inflow/Outflow	
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	(9,388,378)
II. Deferred (Inflow)/Outflow from Investment Experience	(4,503)
III. Deferred (Inflow)/Outflow from Changes in Assumptions	(1,564,315)

Change in Deferred Inflow/Outflow	
I. Deferred Outflow at the beginning of the period	7,854,936
II. Deferred Outflow created during the period	663,333
III. Deferred Outflow recognized during the period	4,233,375
IV. Change in Deferred Outflow (II. - III.)	(3,570,042)
V. Deferred Outflow at end of the period (I. + IV.)	4,284,894
VI. Deferred Inflow at the beginning of the period	(10,079,992)
VII. Deferred Inflow created during the period	(11,283,294)
VIII. Deferred Inflow recognized during the period	(6,121,196)
IX. Change in Deferred Inflow (VII. - VIII.)	(5,162,098)
X. Deferred Inflow at end of the period (VI. + IX.)	(15,242,090)

Net OPEB Liability	
I. Net OPEB Liability at beginning of period	89,379,952
II. Service Cost	2,382,209
III. Interest on Total OPEB Liability, Service Cost, and Payments	4,670,940
IV. Projected Investment Income	(78,732)
V. OPEB Plan Administrative Expense	0
VI. Total Employer Contributions	(3,566,575)
VII. Expense Related to Change in Benefit Terms	0
VIII. Net OPEB Expense/(Income) - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + ... + VI. + VII.)	3,407,842
IX. Deferred Outflow created during the period	663,333
X. Deferred Inflow created during the period	(11,283,294)
XI. Net OPEB Liability at end of period (I. + VIII. + IX. + X.)	82,167,833

Net OPEB Expense	
I. Service Cost	2,382,209
II. Interest on Total OPEB Liability, Service Cost, and Payments	4,670,940
III. Projected Investment Income	(78,732)
IV. Recognition of Deferred (Inflow)/Outflow	(1,887,821)
V. OPEB Plan Administrative Expense	0
VI. Expense Related to Change in Benefit Terms	0
VII. Financial Statement Expense/(Income) (I. + II. + III. + IV. + V. + VI.)	5,086,596
VIII. Benefit Payments	(3,466,575)
IX. Contributions to Trust	(100,000)
X. Total Employer Payments (VIII. + IX.)	(3,566,575)
XI. Total Net OPEB Expense/(Income) under GASB 75 (IX. + X.)	1,520,021

EXHIBIT A
REQUIRED SUPPLEMENTARY INFORMATION
(As of the June 30, 2023 Measurement Date)

Schedule of Changes in the City's Net OPEB Liability and Related Ratios					
Valuation Date	July 1, 2022	July 1, 2020	July 1, 2020	July 1, 2018	July 1, 2018
Measurement Date	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019
For the Reporting Period & Fiscal Year Ending on:	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019
Total OPEB Liability	83,514,065	90,558,732	96,642,165	89,375,286	77,411,201
I. Service Cost	2,382,209	2,821,835	3,141,029	3,030,651	2,417,544
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	4,670,940	4,156,649	3,410,587	3,555,865	3,437,638
III. Changes in Benefit Terms	0	0	0	0	0
IV. Difference Between Expected & Actual Plan Experience	(11,283,294)	0	(113,761)	(75,075)	(9,654,268)
V. Changes of Assumptions	652,053	(9,706,008)	3,992,816	8,329,553	8,642,414
VI. Benefit Payments Excluding Implicit Cost	(2,956,460)	(2,737,986)	(2,581,429)	(2,331,339)	(2,223,258)
VII. Implicit Cost Amount	(510,115)	(617,923)	(582,363)	(545,570)	(559,217)
VIII. Total Benefit Payments	(3,466,575)	(3,355,909)	(3,163,792)	(2,876,909)	(2,782,475)
IX. Other	0	0	0	0	0
X. Net Change in OPEB Liability [I.+II.+III.+IV.+V.+VIII.+IX.]	(7,044,667)	(6,083,433)	7,266,879	11,964,085	2,060,853
XI. Total OPEB Liability - Beginning of Period	90,558,732	96,642,165	89,375,286	77,411,201	75,350,348
XII. Prior Period Adjustment	0	0	0	0	0
XIII. Total OPEB Liability - Beginning of Period with Adjustment [XI.+XII.]	90,558,732	96,642,165	89,375,286	77,411,201	75,350,348
XIV. Total OPEB Liability - End of Period [XII.+XIII.]	83,514,065	90,558,732	96,642,165	89,375,286	77,411,201
Plan Fiduciary Net Position	1,346,232	1,178,780	1,020,910	788,904	773,676
XV. Earnings from Plan Investments	67,452	57,870	132,006	15,228	38,223
XVI. Employer Contribution to Trust	3,566,575	3,455,909	3,263,792	2,876,909	2,842,475
XVII. Benefit Payments from Trust, Including Refunds of Member Contributions	(3,466,575)	(3,355,909)	(3,163,792)	(2,876,909)	(2,782,475)
XVIII. Administrative Expense	0	0	0	0	0
XIX. Other	0	0	0	0	0
XX. Net Change in Plan Fiduciary Net Position [XV.+XVI.+XVII.+XVIII.+XIX.]	167,452	157,870	232,006	15,228	98,223
XXI. Plan Fiduciary Net Position - Beginning of Period	1,178,780	1,020,910	788,904	773,676	675,453
XXII. Prior Period Adjustment	0	0	0	0	0
XXIII. Plan Fiduciary Net Position - Beginning of Period with Adjustment [XXI.+XXII.]	1,178,780	1,020,910	788,904	773,676	675,453
XXIV. Plan Fiduciary Net Position - End of Period [XXII.+XXIII.]	1,346,232	1,178,780	1,020,910	788,904	773,676
XXV. Net OPEB Liability [XIV.-XXIV.]	82,167,833	89,379,952	95,621,255	88,586,382	76,637,525
XXVI. Plan Fiduciary Net Position as % of Total OPEB Liability [XXIV./XIV.]	1.61%	1.30%	1.06%	0.88%	1.00%
XXVII. Covered Employee Payroll	46,268,736	41,372,226	40,167,210	39,836,189	38,675,912
XXVIII. Plan NOL as % of Covered Employee Payroll [XXV./XXVII.]	177.59%	216.04%	238.06%	222.38%	1981.53%
Single Discount Rate to Calculate Plan Liabilities	5.35%	5.12%	4.25%	3.75%	4.50%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION (As of the June 30, 2023 Measurement Date)

Schedule of Changes in the City's Net OPEB Liability and Related Ratios		
Valuation Date	July 1, 2016	July 1, 2016
Measurement Date	June 30, 2018	June 30, 2017
For the Reporting Period & Fiscal Year Ending on:	June 30, 2018	June 30, 2017
Total OPEB Liability	75,350,348	84,082,487
I. Service Cost	2,423,566	3,005,942
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	3,430,587	2,885,278
III. Changes in Benefit Terms	0	0
IV. Difference Between Expected & Actual Plan Experience	(11,929,512)	0
V. Changes of Assumptions	0	0
VI. Benefit Payments Excluding Implicit Cost	(2,318,266)	(2,168,509)
VII. Implicit Cost Amount	(338,514)	(288,938)
VIII. Total Benefit Payments	(2,656,780)	(2,457,447)
IX. Other	0	0
X. Net Change in OPEB Liability [I.+II.+III.+IV.+V.+VIII.+IX.]	(8,732,139)	3,433,773
XI. Total OPEB Liability - Beginning of Period	84,082,487	80,648,714
XII. Prior Period Adjustment	0	0
XIII. Total OPEB Liability - Beginning of Period with Adjustment [XI.+XII.]	84,082,487	80,648,714
XIV. Total OPEB Liability - End of Period [XII.+XIII.]	75,350,348	84,082,487
Plan Fiduciary Net Position	675,453	571,053
XV. Earnings from Plan Investments	54,400	66,510
XVI. Employer Contribution to Trust	2,706,780	2,482,447
XVII. Benefit Payments from Trust, Including Refunds of Member Contributions	(2,656,780)	(2,457,447)
XVIII. Administrative Expense	0	0
XIX. Other	0	0
XX. Net Change in Plan Fiduciary Net Position [XV.+XVI.+XVII.+XVIII.+XIX.]	104,400	91,510
XXI. Plan Fiduciary Net Position - Beginning of Period	571,053	479,543
XXII. Prior Period Adjustment	0	0
XXIII. Plan Fiduciary Net Position - Beginning of Period with Adjustment [XXI.+XXII.]	571,053	479,543
XXIV. Plan Fiduciary Net Position - End of Period [XXII.+XXIII.]	675,453	571,053
XXV. Net OPEB Liability [XIV.-XXIV.]	74,674,895	83,511,434
XXVI. Plan Fiduciary Net Position as % of Total OPEB Liability [XXIV./XIV.]	0.90%	0.68%
XXVII. Covered Employee Payroll	41,172,059	39,972,872
XXVIII. Plan NOL as % of Covered Employee Payroll [XXV./XXVII.]	181.37%	208.92%
Single Discount Rate to Calculate Plan Liabilities	4.50%	3.50%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2023 Measurement Date)

The City's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which is composed of the service cost and an amortization of the unfunded liability. For FY 2023 and future years we have used a 30-year amortization increasing by 3.00% per year of the City's unfunded liability for the purpose of calculating ADC. The following table shows the components of the City's annual ADC and the amount actually contributed to the plan:

Actuarially Determined Contribution - Deficiency / (Excess)					
For the Fiscal Year Ending:	<u>June 30, 2023</u>	<u>June 30, 2022</u>	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
I. Service Cost	2,382,209	2,821,835	3,141,029	3,030,651	2,417,544
II. 30 Year Amortization of NOL Increasing by 3.00% per year	<u>3,727,297</u>	<u>3,941,714</u>	<u>3,775,998</u>	<u>4,789,012</u>	<u>4,502,293</u>
III. Actuarial Determined Contribution [I. + II.]	6,109,506	6,763,549	6,917,027	7,819,663	6,919,837
IV. Contributions in Relation to the Actuarially Determined Contribution	<u>(3,566,575)</u>	<u>(3,455,909)</u>	<u>(3,263,792)</u>	<u>(2,876,909)</u>	<u>(2,842,475)</u>
V. Contribution Deficiency / (Excess) [III. + IV.]	<u>2,542,931</u>	<u>3,307,640</u>	<u>3,653,235</u>	<u>4,942,754</u>	<u>4,077,362</u>
Covered Employee Payroll	46,268,736	41,372,226	40,167,210	39,836,189	38,675,912
Contributions as a % of Covered Employee Payroll	7.71%	8.35%	8.13%	7.22%	7.35%
Discount Rate	5.35%	5.12%	4.25%	3.75%	4.50%
Money Weighted Rate of Return	5.72%	5.67%	16.73%	1.97%	5.66%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION
(As of the June 30, 2023 Measurement Date)

Actuarially Determined Contribution - Deficiency / (Excess) (Continued)		
<u>For the Fiscal Year Ending:</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
I. Service Cost	2,423,566	3,005,942
II. 30 Year Amortization of NOL Increasing by 3.00% per year	<u>4,906,120</u>	<u>4,211,284</u>
III. Actuarial Determined Contribution [I. + II.]	7,329,686	7,217,226
IV. Contributions in Relation to the Actuarially Determined Contribution	<u>(2,706,780)</u>	<u>(2,482,447)</u>
V. Contribution Deficiency / (Excess) [III. + IV.]	<u>4,622,906</u>	<u>4,734,779</u>
Covered Employee Payroll	41,172,059	39,972,872
Contributions as a % of Covered Employee Payroll	6.57%	6.21%
Discount Rate	4.50%	3.50%
Money Weighted Rate of Return	9.53%	7.04%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION
(As of the June 30, 2023 Measurement Date)

Actuarially Determined Contribution – by Function:

	Fiscal Year Ending June 30, 2023				Total
	General Government Employees and Retirees	School Employees and Retirees	Water Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	
I. Service Cost	701,589	1,548,267	76,149	56,204	2,382,209
II. 30 Year Amortization of NOL Increasing by 3.00% per year	1,410,946	2,171,750	69,778	74,823	3,727,297
III. Actuarial Determined Contribution [I. + II.]	2,112,535	3,720,017	145,927	131,027	6,109,506
IV. Employer Share of Costs (Including Implicit Cost)	(1,403,392)	(1,942,994)	(69,029)	(51,160)	(3,466,575)
V. Employer OPEB Trust (Contribution)/Withdrawal	(37,855)	(58,266)	(1,872)	(2,007)	(100,000)
VI. Total Employer Contribution [IV. + V.]	(1,441,247)	(2,001,260)	(70,901)	(53,167)	(3,566,575)
VII. Contribution Deficiency / (Excess) [III. + VI.]	671,288	1,718,757	75,026	77,860	2,542,931

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2023 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date: Actuarially Determined Contribution was calculated as of July 1, 2022.

Actuarial Cost Method: Individual Entry Age Normal

Asset-Valuation Method: Market Value of Assets as of the Measurement Date, June 30, 2023.

Actuarial Assumptions:

Investment Rate of Return: 6.30%, net of OPEB plan investment expense, including inflation.

Municipal Bond Rate 4.13% as of June 30, 2023 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)

Single Equivalent Discount Rate: 5.35%, net of OPEB plan investment expense, including inflation

Inflation: 2.50% as of June 30, 2023 and for future periods

Salary Increases: 3.00% annually as of June 30, 2023 and for future periods

Cost of Living Adjustment: Not Applicable

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2023 Measurement Date)

Pre-Retirement Mortality:	General: RP-2014 Mortality Table for Blue Collar Employees projected generationally with scale MP-2016 for males and females, set forward 1 year for females Teachers: RP-2014 Mortality Table for White Collar Employees projected generationally with scale MP-2016 for males and females
Post-Retirement Mortality:	General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year for females Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females
Disabled Mortality:	General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2023 Measurement Date)

Plan Membership

At July 1, 2022, OPEB plan membership consisted of the following:

Retirees & Beneficiaries:	556
Actives:	<u>612</u>
Total:	1,168

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

Changes in Assumptions: From June 30, 2022 to June 30, 2023

- ✓ Due to the GASB 75 standards the discount rate has been changed from 5.12% to 5.35%.
- ✓ Based on ongoing actuarial research, we have modified our assumption for future increases in healthcare costs using the Getzen model to reflect higher costs in the near-term.

Contributions/Withdrawals:

The contribution requirements of plan members and the City are established and may be amended through City ordinances. The City contributed \$100,000 beyond the pay-as-you-go cost for the period ending on the June 30, 2023 Measurement Date. For the year ending on the June 30, 2023 Measurement Date total City premiums plus implicit costs for the retiree medical program were \$3,466,575. \$510,115 of the \$3,466,575 represents implicit cost.

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2023 Measurement Date)

Census Data Manipulation:

In the absence of data, the following was assumed:

Spouse Sex:	Male participants had female spouses and vice versa.
Spouse Age:	Male spouses were three years older than female spouses and same sex spouses were the same age.
Hire Age:	Participants who were not on the previous valuation were hired halfway between last valuation and the current valuation. If we did not have census data related to the last valuation, the participants were assumed to have been hired at age forty.
Retiree Age:	Retirees had the same birth date as they had the prior valuation. If we did not have census data related to the last valuation, retirees who were enrolled in Active plans were assumed to be age sixty-two and retirees who were enrolled in Medicare Supplement plans were assumed to be age seventy-two. Those not enrolled in a medical plan were assumed to be sixty-seven.
School Demographics:	Two thirds of school participants were teachers.
Other Material Changes:	No other data changes were deemed to be material.

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES

Table 1: Projection of Contributions using a July 1, 2022 Valuation Date

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total Payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2023	46,268,736	0	46,268,736	0	3,466,575	0	3,466,575
June 30, 2024	43,259,923	4,396,875	47,656,798	0	3,193,221	0	3,193,221
June 30, 2025	40,471,658	8,614,844	49,086,502	0	3,391,542	0	3,391,542
June 30, 2026	37,959,540	12,599,557	50,559,097	0	3,594,774	0	3,594,774
June 30, 2027	35,589,334	16,486,536	52,075,870	0	3,806,832	0	3,806,832
June 30, 2028	33,529,509	20,108,637	53,638,146	0	4,016,816	0	4,016,816
June 30, 2029	31,445,403	23,801,887	55,247,290	0	4,178,388	0	4,178,388
June 30, 2030	29,706,618	27,198,091	56,904,709	0	4,385,919	0	4,385,919
June 30, 2031	28,179,559	30,432,291	58,611,850	0	4,607,749	0	4,607,749
June 30, 2032	26,807,027	33,563,179	60,370,206	0	4,818,566	0	4,818,566
June 30, 2033	24,952,995	37,228,317	62,181,312	0	5,078,779	0	5,078,779
June 30, 2034	23,131,207	40,915,544	64,046,751	0	5,325,265	21,640	5,346,905
June 30, 2035	21,786,216	44,181,938	65,968,154	0	5,551,544	55,593	5,607,137
June 30, 2036	20,471,363	47,475,836	67,947,199	0	5,744,824	102,757	5,847,581
June 30, 2037	19,291,457	50,694,158	69,985,615	0	5,950,125	170,180	6,120,305
June 30, 2038	18,284,113	53,801,070	72,085,183	0	6,195,787	254,321	6,450,108
June 30, 2039	17,250,588	56,997,150	74,247,738	0	6,338,696	310,013	6,648,709
June 30, 2040	16,411,642	60,063,528	76,475,170	0	6,480,930	375,663	6,856,593
June 30, 2041	15,603,330	63,166,095	78,769,425	0	6,571,209	450,303	7,021,512
June 30, 2042	14,797,623	66,334,885	81,132,508	0	6,640,617	500,900	7,141,517
June 30, 2043	13,996,247	69,570,236	83,566,483	0	6,579,688	557,675	7,137,363
June 30, 2044	13,273,558	72,799,919	86,073,477	0	6,611,467	655,494	7,266,961
June 30, 2045	12,587,117	76,068,564	88,655,681	0	6,636,568	783,963	7,420,531
June 30, 2046	11,891,194	79,424,157	91,315,351	0	6,691,273	944,865	7,636,138
June 30, 2047	11,059,838	82,994,974	94,054,812	0	6,748,977	1,155,154	7,904,131
June 30, 2048	10,349,298	86,527,158	96,876,456	0	6,802,801	1,401,625	8,204,426
June 30, 2049	9,714,079	90,068,671	99,782,750	0	6,875,226	1,586,132	8,461,358
June 30, 2050	9,024,470	93,751,763	102,776,233	0	6,842,141	1,797,897	8,640,038
June 30, 2051	8,271,376	97,588,144	105,859,520	0	6,778,584	2,030,000	8,808,584
June 30, 2052	7,527,635	101,507,671	109,035,306	0	6,845,490	2,210,381	9,055,871
June 30, 2053	6,896,723	105,409,642	112,306,365	0	6,885,096	2,405,520	9,290,616
June 30, 2054	6,150,657	109,524,899	115,675,556	0	6,778,672	2,652,501	9,431,173
June 30, 2055	5,424,261	113,721,562	119,145,823	0	6,869,466	2,927,758	9,797,224
June 30, 2056	4,746,458	117,973,740	122,720,198	0	6,839,361	3,235,259	10,074,620
June 30, 2057	4,207,272	122,194,532	126,401,804	0	6,704,419	3,592,239	10,296,658
June 30, 2058	3,662,326	126,531,532	130,193,858	0	6,672,265	3,978,775	10,651,040
June 30, 2059	3,025,831	131,073,843	134,099,674	0	6,613,947	4,330,204	10,944,151
June 30, 2060	2,444,775	135,677,889	138,122,664	0	6,571,402	4,707,725	11,279,127
June 30, 2061	1,926,496	140,339,848	142,266,344	0	6,532,993	5,103,455	11,636,448
June 30, 2062	1,453,188	145,081,146	146,534,334	0	6,390,781	5,478,020	11,868,801

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES (CONTINUED)

Table 1: Projection of Contributions using a July 1, 2022 Valuation Date

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total Payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2063	1,025,753	149,904,611	150,930,364	0	6,311,600	5,870,374	12,181,974
June 30, 2064	714,909	154,743,366	155,458,275	0	6,119,382	6,317,649	12,437,031
June 30, 2065	451,428	159,670,595	160,122,023	0	5,943,419	6,793,648	12,737,067
June 30, 2066	298,559	164,627,125	164,925,684	0	5,836,952	7,310,764	13,147,716
June 30, 2067	167,365	169,706,090	169,873,455	0	5,640,683	7,880,462	13,521,145
June 30, 2068	110,262	174,859,397	174,969,659	0	5,484,713	8,488,112	13,972,825
June 30, 2069	38,405	180,180,344	180,218,749	0	5,370,547	9,092,354	14,462,901
June 30, 2070	13,159	185,612,152	185,625,311	0	5,224,880	9,723,605	14,948,485
June 30, 2071	0	191,194,070	191,194,070	0	5,081,334	10,384,503	15,465,837
June 30, 2072	0	196,929,892	196,929,892	0	4,934,245	11,027,913	15,962,158
June 30, 2073	0	202,837,789	202,837,789	0	4,756,299	11,688,460	16,444,759
June 30, 2074	0	208,922,923	208,922,923	0	4,609,072	12,385,687	16,994,759
June 30, 2075	0	215,190,611	215,190,611	0	4,415,146	13,094,843	17,509,989
June 30, 2076	0	221,646,329	221,646,329	0	4,222,712	13,833,577	18,056,289
June 30, 2077	0	228,295,719	228,295,719	0	4,051,713	14,603,110	18,654,823
June 30, 2078	0	235,144,591	235,144,591	0	3,845,057	15,395,974	19,241,031
June 30, 2079	0	242,198,929	242,198,929	0	3,658,622	16,228,810	19,887,432
June 30, 2080	0	249,464,897	249,464,897	0	3,458,680	17,084,093	20,542,773
June 30, 2081	0	256,948,844	256,948,844	0	3,250,920	17,968,561	21,219,481
June 30, 2082	0	264,657,309	264,657,309	0	3,064,852	18,879,854	21,944,706
June 30, 2083	0	272,597,028	272,597,028	0	2,857,118	19,812,456	22,669,574
June 30, 2084	0	280,774,939	280,774,939	0	2,666,288	20,774,205	23,440,493
June 30, 2085	0	289,198,187	289,198,187	0	2,470,001	21,758,685	24,228,686
June 30, 2086	0	297,874,133	297,874,133	0	2,270,524	22,775,781	25,046,305
June 30, 2087	0	306,810,357	306,810,357	0	2,085,962	23,825,157	25,911,119
June 30, 2088	0	316,014,668	316,014,668	0	1,898,555	24,908,690	26,807,245
June 30, 2089	0	325,495,108	325,495,108	0	1,718,055	26,045,749	27,763,804
June 30, 2090	0	335,259,961	335,259,961	0	1,545,129	27,215,261	28,760,390
June 30, 2091	0	345,317,760	345,317,760	0	1,380,977	28,427,878	29,808,855
June 30, 2092	0	355,677,293	355,677,293	0	1,226,178	29,690,240	30,916,418
June 30, 2093	0	366,347,612	366,347,612	0	1,081,017	30,988,277	32,069,294
June 30, 2094	0	377,338,040	377,338,040	0	945,830	32,327,786	33,273,616
June 30, 2095	0	388,658,181	388,658,181	0	820,806	33,707,142	34,527,948
June 30, 2096	0	400,317,926	400,317,926	0	705,948	35,132,094	35,838,042
June 30, 2097	0	412,327,464	412,327,464	0	601,283	36,605,566	37,206,849

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

FIDUCIARY NET POSITION PROJECTION DISCLOSURES

Table 2: Projection of OPEB Plan's Fiduciary Net Position using a July 1 2022 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Employer Share of Benefit Payments for Current Plan Members	III. Contributions to Trust for Current Plan Members beyond Pay-as-you- go	IV. Gross Contributions to Trust for Current Plan Members [III. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust	VII. Trust Withdrawals [V. + VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
June 30, 2023	1,178,780	3,466,575	100,000	3,566,575	0	3,466,575	3,466,575	67,452	1,346,232
June 30, 2024	1,346,232	3,193,221	90,774	3,283,995	0	3,193,221	3,193,221	79,804	1,516,810
June 30, 2025	1,516,810	3,391,542	82,450	3,473,992	0	3,391,542	3,391,542	98,117	1,697,377
June 30, 2026	1,697,377	3,594,774	75,080	3,669,854	0	3,594,774	3,594,774	109,264	1,881,721
June 30, 2027	1,881,721	3,806,832	68,341	3,875,173	0	3,806,832	3,806,832	120,668	2,070,730
June 30, 2028	2,070,730	4,016,816	62,511	4,079,327	0	4,016,816	4,016,816	132,395	2,265,636
June 30, 2029	2,265,636	4,178,388	56,918	4,235,306	0	4,178,388	4,178,388	144,501	2,467,055
June 30, 2030	2,467,055	4,385,919	52,204	4,438,123	0	4,385,919	4,385,919	157,044	2,676,303
June 30, 2031	2,676,303	4,607,749	48,078	4,655,827	0	4,607,749	4,607,749	170,098	2,894,479
June 30, 2032	2,894,479	4,818,566	44,404	4,862,970	0	4,818,566	4,818,566	183,730	3,122,613
June 30, 2033	3,122,613	5,078,779	40,129	5,118,908	0	5,078,779	5,078,779	197,969	3,360,711
June 30, 2034	3,360,711	5,325,265	36,116	5,361,381	0	5,346,905	5,346,905	212,845	3,588,032
June 30, 2035	3,588,032	5,551,544	33,025	5,584,569	0	5,607,137	5,607,137	227,070	3,792,534
June 30, 2036	3,792,534	5,744,824	30,128	5,774,952	0	5,847,581	5,847,581	239,864	3,959,769
June 30, 2037	3,959,769	5,950,125	27,565	5,977,690	0	6,120,305	6,120,305	250,320	4,067,474
June 30, 2038	4,067,474	6,195,787	1,876,980	8,072,767	0	6,450,108	6,450,108	314,473	6,004,606
June 30, 2039	6,004,606	6,338,696	1,719,303	8,057,999	0	6,648,709	6,648,709	431,621	7,845,517
June 30, 2040	7,845,517	6,480,930	1,588,047	8,068,977	0	6,856,593	6,856,593	543,527	9,601,428
June 30, 2041	9,601,428	6,571,209	1,465,856	8,037,065	0	7,021,512	7,021,512	650,359	11,267,340
June 30, 2042	11,267,340	6,640,617	1,349,674	7,990,291	0	7,141,517	7,141,517	751,708	12,867,822
June 30, 2043	12,867,822	6,579,688	1,239,399	7,819,087	0	7,137,363	7,137,363	849,118	14,398,664
June 30, 2044	14,398,664	6,611,467	1,141,168	7,752,635	0	7,266,961	7,266,961	942,514	15,826,852
June 30, 2045	15,826,852	6,636,568	1,050,634	7,687,202	0	7,420,531	7,420,531	1,029,681	17,123,204
June 30, 2046	17,123,204	6,691,273	963,637	7,654,910	0	7,636,138	7,636,138	1,108,653	18,250,629
June 30, 2047	18,250,629	6,748,977	870,161	7,619,138	0	7,904,131	7,904,131	1,176,781	19,142,417
June 30, 2048	19,142,417	6,802,801	790,541	7,593,342	0	8,204,426	8,204,426	1,230,494	19,761,827
June 30, 2049	19,761,827	6,875,226	720,407	7,595,633	0	8,461,358	8,461,358	1,267,341	20,163,443
June 30, 2050	20,163,443	6,842,141	649,772	7,491,913	0	8,640,038	8,640,038	1,290,452	20,305,770
June 30, 2051	20,305,770	6,778,584	578,202	7,356,786	0	8,808,584	8,808,584	1,297,199	20,151,171
June 30, 2052	20,151,171	6,845,490	510,885	7,356,375	0	9,055,871	9,055,871	1,285,371	19,737,046
June 30, 2053	19,737,046	6,885,096	454,433	7,339,529	0	9,290,616	9,290,616	1,257,530	19,043,489
June 30, 2054	19,043,489	6,778,672	393,470	7,172,142	0	9,431,173	9,431,173	1,211,945	17,996,403
June 30, 2055	17,996,403	6,869,466	336,894	7,206,360	0	9,797,224	9,797,224	1,144,223	16,549,762
June 30, 2056	16,549,762	6,839,361	286,210	7,125,571	0	10,074,620	10,074,620	1,051,513	14,652,226
June 30, 2057	14,652,226	6,704,419	246,308	6,950,727	0	10,296,658	10,296,658	930,730	12,237,025
June 30, 2058	12,237,025	6,672,265	208,160	6,880,425	0	10,651,040	10,651,040	777,389	9,243,799
June 30, 2059	9,243,799	6,613,947	166,974	6,780,921	0	10,944,151	10,944,151	587,539	5,668,108
June 30, 2060	5,668,108	6,571,402	130,980	6,702,382	0	11,279,127	11,279,127	361,154	1,452,517
June 30, 2061	1,452,517	6,532,993	100,207	6,633,200	0	11,636,448	11,636,448	94,617	0
June 30, 2062	0	6,390,781	73,386	6,464,167	0	11,868,801	11,868,801	2,276	0

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

FIDUCIARY POSITION PROJECTION DISCLOSURES (CONTINUED)

Table 2: Projection of OPEB Plan's Fiduciary Net Position using a July 1 2022 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Employer Share of Benefit Payments for Current Plan Members	III. Contributions to	IV. Gross	V. Administrative	VI. Benefit Payments Withdrawn from the Trust	VII. Trust Withdrawals [V. + VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
			Trust for Current Plan Members beyond Pay-as-you- go	Contributions to Trust for Current Plan Members [III. + III.]	Expenses Withdrawn from the Trust for Current Plan Members				
June 30, 2063	0	6,311,600	50,292	6,361,892	0	12,181,974	12,181,974	1,560	0
June 30, 2064	0	6,119,382	34,031	6,153,413	0	12,437,031	12,437,031	1,056	0
June 30, 2065	0	5,943,419	20,863	5,964,282	0	12,737,067	12,737,067	647	0
June 30, 2066	0	5,836,952	13,396	5,850,348	0	13,147,716	13,147,716	416	0
June 30, 2067	0	5,640,683	7,291	5,647,974	0	13,521,145	13,521,145	226	0
June 30, 2068	0	5,484,713	4,663	5,489,376	0	13,972,825	13,972,825	145	0
June 30, 2069	0	5,370,547	1,577	5,372,124	0	14,462,901	14,462,901	49	0
June 30, 2070	0	5,224,880	525	5,225,405	0	14,948,485	14,948,485	16	0
June 30, 2071	0	5,081,334	0	5,081,334	0	15,465,837	15,465,837	0	0
June 30, 2072	0	4,934,245	0	4,934,245	0	15,962,158	15,962,158	0	0
June 30, 2073	0	4,756,299	0	4,756,299	0	16,444,759	16,444,759	0	0
June 30, 2074	0	4,609,072	0	4,609,072	0	16,994,759	16,994,759	0	0
June 30, 2075	0	4,415,146	0	4,415,146	0	17,509,989	17,509,989	0	0
June 30, 2076	0	4,222,712	0	4,222,712	0	18,056,289	18,056,289	0	0
June 30, 2077	0	4,051,713	0	4,051,713	0	18,654,823	18,654,823	0	0
June 30, 2078	0	3,845,057	0	3,845,057	0	19,241,031	19,241,031	0	0
June 30, 2079	0	3,658,622	0	3,658,622	0	19,887,432	19,887,432	0	0
June 30, 2080	0	3,458,680	0	3,458,680	0	20,542,773	20,542,773	0	0
June 30, 2081	0	3,250,920	0	3,250,920	0	21,219,481	21,219,481	0	0
June 30, 2082	0	3,064,852	0	3,064,852	0	21,944,706	21,944,706	0	0
June 30, 2083	0	2,857,118	0	2,857,118	0	22,669,574	22,669,574	0	0
June 30, 2084	0	2,666,288	0	2,666,288	0	23,440,493	23,440,493	0	0
June 30, 2085	0	2,470,001	0	2,470,001	0	24,228,686	24,228,686	0	0
June 30, 2086	0	2,270,524	0	2,270,524	0	25,046,305	25,046,305	0	0
June 30, 2087	0	2,085,962	0	2,085,962	0	25,911,119	25,911,119	0	0
June 30, 2088	0	1,898,555	0	1,898,555	0	26,807,245	26,807,245	0	0
June 30, 2089	0	1,718,055	0	1,718,055	0	27,763,804	27,763,804	0	0
June 30, 2090	0	1,545,129	0	1,545,129	0	28,760,390	28,760,390	0	0
June 30, 2091	0	1,380,977	0	1,380,977	0	29,808,855	29,808,855	0	0
June 30, 2092	0	1,226,178	0	1,226,178	0	30,916,418	30,916,418	0	0
June 30, 2093	0	1,081,017	0	1,081,017	0	32,069,294	32,069,294	0	0
June 30, 2094	0	945,830	0	945,830	0	33,273,616	33,273,616	0	0
June 30, 2095	0	820,806	0	820,806	0	34,527,948	34,527,948	0	0
June 30, 2096	0	705,948	0	705,948	0	35,838,042	35,838,042	0	0
June 30, 2097	0	601,283	0	601,283	0	37,206,849	37,206,849	0	0

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES

Table 3: Actuarial Present Values of Projected Benefit Payments using a July 1, 2022 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments for Current Plan Members	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments [II. - III.]	V. Present Value of Funded Benefit Payments using the Long-Term Rate of Return [6.30%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [4.13%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [5.35%]	
June 30, 2023	1,178,780	3,466,575	1,178,780	2,287,795	1,178,780	2,287,795	3,466,575	Sum of Column V.
June 30, 2024	1,346,232	3,193,221	1,346,232	1,846,989	1,266,446	1,773,808	3,031,107	56,054,972
June 30, 2025	1,516,810	3,391,542	1,516,810	1,874,732	1,342,347	1,729,114	3,055,918	
June 30, 2026	1,697,377	3,594,774	1,697,377	1,897,397	1,413,118	1,680,680	3,074,597	Sum of Column VI.
June 30, 2027	1,881,721	3,806,832	1,881,721	1,925,111	1,473,744	1,637,664	3,090,670	42,084,607
June 30, 2028	2,070,730	4,016,816	2,070,730	1,946,086	1,525,658	1,589,912	3,095,587	
June 30, 2029	2,265,636	4,178,388	2,265,636	1,912,752	1,570,329	1,500,763	3,056,624	Sum of Column VII.
June 30, 2030	2,467,055	4,385,919	2,467,055	1,918,864	1,608,592	1,445,905	3,045,553	[V. + VI.]
June 30, 2031	2,676,303	4,607,749	2,676,303	1,931,446	1,641,607	1,397,721	3,037,152	98,139,579
June 30, 2032	2,894,479	4,818,566	2,894,479	1,924,087	1,670,210	1,337,226	3,014,864	
June 30, 2033	3,122,613	5,078,779	3,122,613	1,956,166	1,695,062	1,305,654	3,016,349	
June 30, 2034	3,360,711	5,325,265	3,360,711	1,964,554	1,716,190	1,259,298	3,002,173	
June 30, 2035	3,588,032	5,551,544	3,588,032	1,963,512	1,723,682	1,208,761	2,970,848	
June 30, 2036	3,792,534	5,744,824	3,792,534	1,952,290	1,713,946	1,154,233	2,918,204	
June 30, 2037	3,959,769	5,950,125	3,959,769	1,990,356	1,683,465	1,130,113	2,869,044	
June 30, 2038	4,067,474	6,195,787	4,067,474	2,128,313	1,626,769	1,160,564	2,835,827	
June 30, 2039	6,004,606	6,338,696	6,004,606	334,090	2,259,188	174,960	2,753,946	
June 30, 2040	7,845,517	6,480,930	6,480,930	0	2,293,886	0	2,672,791	
June 30, 2041	9,601,428	6,571,209	6,571,209	0	2,187,996	0	2,572,440	
June 30, 2042	11,267,340	6,640,617	6,640,617	0	2,080,063	0	2,467,633	
June 30, 2043	12,867,822	6,579,688	6,579,688	0	1,938,831	0	2,320,864	
June 30, 2044	14,398,664	6,611,467	6,611,467	0	1,832,733	0	2,213,678	
June 30, 2045	15,826,852	6,636,568	6,636,568	0	1,730,660	0	2,109,271	
June 30, 2046	17,123,204	6,691,273	6,691,273	0	1,641,511	0	2,018,691	
June 30, 2047	18,250,629	6,748,977	6,748,977	0	1,557,541	0	1,932,730	
June 30, 2048	19,142,417	6,802,801	6,802,801	0	1,476,917	0	1,849,240	
June 30, 2049	19,761,827	6,875,226	6,875,226	0	1,404,178	0	1,774,045	
June 30, 2050	20,163,443	6,842,141	6,842,141	0	1,314,601	0	1,675,876	
June 30, 2051	20,305,770	6,778,584	6,778,584	0	1,225,202	0	1,576,018	
June 30, 2052	20,151,171	6,845,490	6,845,490	0	1,163,965	0	1,510,772	
June 30, 2053	19,737,046	6,885,096	6,885,096	0	1,101,316	0	1,442,370	
June 30, 2054	19,043,489	6,778,672	6,778,672	0	1,020,031	0	1,347,980	
June 30, 2055	17,996,403	6,869,466	6,869,466	0	972,430	0	1,296,684	
June 30, 2056	16,549,762	6,839,361	6,839,361	0	910,789	0	1,225,459	
June 30, 2057	14,652,226	6,704,419	6,704,419	0	839,905	0	1,140,293	
June 30, 2058	12,237,025	6,672,265	6,672,265	0	786,338	0	1,077,212	
June 30, 2059	9,243,799	6,613,947	6,613,947	0	733,269	0	1,013,586	
June 30, 2060	5,668,108	6,571,402	5,668,108	903,294	591,163	202,391	955,939	
June 30, 2061	1,452,517	6,532,993	1,452,517	5,080,476	142,514	1,093,224	902,104	
June 30, 2062	0	6,390,781	0	6,390,781	0	1,320,690	837,665	

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES (CONTINUED)

Table 3: Actuarial Present Values of Projected Benefit Payments using a July 1, 2022 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit		III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments [II. - III.]	V. Present Value of	VI. Present Value of	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [5.35%]
		Payments for Current Plan Members	Funded			Funded Benefit Payments using the Long-Term Rate of Return [6.30%]	Unfunded Benefit Payments using the Municipal Bond Rate [4.13%]	
June 30, 2063	0	6,311,600	0	6,311,600	0	1,252,647	785,287	
June 30, 2064	0	6,119,382	0	6,119,382	0	1,166,377	722,718	
June 30, 2065	0	5,943,419	0	5,943,419	0	1,087,953	666,300	
June 30, 2066	0	5,836,952	0	5,836,952	0	1,026,129	621,143	
June 30, 2067	0	5,640,683	0	5,640,683	0	952,335	569,783	
June 30, 2068	0	5,484,713	0	5,484,713	0	889,312	525,901	
June 30, 2069	0	5,370,547	0	5,370,547	0	836,298	488,811	
June 30, 2070	0	5,224,880	0	5,224,880	0	781,378	451,409	
June 30, 2071	0	5,081,334	0	5,081,334	0	729,802	416,720	
June 30, 2072	0	4,934,245	0	4,934,245	0	680,597	384,113	
June 30, 2073	0	4,756,299	0	4,756,299	0	630,058	351,463	
June 30, 2074	0	4,609,072	0	4,609,072	0	586,364	323,293	
June 30, 2075	0	4,415,146	0	4,415,146	0	539,438	293,968	
June 30, 2076	0	4,222,712	0	4,222,712	0	495,484	266,882	
June 30, 2077	0	4,051,713	0	4,051,713	0	456,582	243,074	
June 30, 2078	0	3,845,057	0	3,845,057	0	416,127	218,965	
June 30, 2079	0	3,658,622	0	3,658,622	0	380,262	197,771	
June 30, 2080	0	3,458,680	0	3,458,680	0	345,237	177,471	
June 30, 2081	0	3,250,920	0	3,250,920	0	311,642	158,342	
June 30, 2082	0	3,064,852	0	3,064,852	0	282,164	141,700	
June 30, 2083	0	2,857,118	0	2,857,118	0	252,617	125,390	
June 30, 2084	0	2,666,288	0	2,666,288	0	226,404	111,074	
June 30, 2085	0	2,470,001	0	2,470,001	0	201,426	97,673	
June 30, 2086	0	2,270,524	0	2,270,524	0	177,823	85,227	
June 30, 2087	0	2,085,962	0	2,085,962	0	156,895	74,324	
June 30, 2088	0	1,898,555	0	1,898,555	0	137,141	64,212	
June 30, 2089	0	1,718,055	0	1,718,055	0	119,186	55,157	
June 30, 2090	0	1,545,129	0	1,545,129	0	102,942	47,087	
June 30, 2091	0	1,380,977	0	1,380,977	0	88,361	39,948	
June 30, 2092	0	1,226,178	0	1,226,178	0	75,347	33,670	
June 30, 2093	0	1,081,017	0	1,081,017	0	63,795	28,177	
June 30, 2094	0	945,830	0	945,830	0	53,606	23,401	
June 30, 2095	0	820,806	0	820,806	0	44,677	19,277	
June 30, 2096	0	705,948	0	705,948	0	36,902	15,738	
June 30, 2097	0	601,283	0	601,283	0	30,186	12,724	

APPENDIX II – PLAN PROVISIONS

Plan Year

July 1 through June 30.

Premium Effective Date

Medicare Supplement Plans: effective January 1, 2023

Active Plans: effective July 1, 2023

Dental Plans: effective July 1, 2023

Creditable Service

Elapsed time from date of hire to termination of service date.

Benefits Offered

Medical, Dental and \$5,000 of Group Term Life Insurance.

Medicare Part A

The City pays Medicare Part A premiums and penalties for a select group of retirees who would have otherwise been ineligible for Medicare. These payments were reflected in the valuation.

Medicare Part B

Medicare Part B Premium reimbursements by the City were not reflected in this valuation.

Medicare Part B Penalty reimbursements have been reflected.

Surviving Spouse Coverage

Spousal benefits do not change after the death of a plan participant.

APPENDIX II – PLAN PROVISIONS

Eligibility

Hire Date	Eligibility
Before April 2, 2012	<ul style="list-style-type: none"> • Age 55 with 10 years of creditable service • 20 years of service regardless of age
On or after April 2, 2012	<ul style="list-style-type: none"> • Age 60 with 10 years of creditable service

Participant Contributions

Group	Individual	Two-Person / Family
Medical	25%	25%
Dental	100%	100%
Life	10%	N/A

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

<u>Pre-Retirement Mortality</u>	General: RP-2014 Mortality Table for Blue Collar Employees projected generationally with scale MP-2016 for males and females, set forward 1 year for females Teachers: RP-2014 Mortality Table for White Collar Employees projected generationally with scale MP-2016 for males and females
<u>Post-Retirement Mortality</u>	General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year for females Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females
<u>Disabled Mortality</u>	General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females
<u>Assumption Experience Study</u>	The actuarial assumptions used to calculate the actuarial accrued liability and the service cost primarily reflect the latest experience studies of the Massachusetts PERAC issued in 2014 and their most recent analysis of retiree mortality during 2015 and 2016.
<u>Discount Rate</u>	5.35% per annum (previously 5.12%)
<u>Net Long Term Rate of Return</u>	6.30% (based on investment policy)
<u>Municipal Bond Rate</u>	4.13% as of June 30, 2023 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
<u>Actuarial Cost Method</u>	Individual Entry Age Normal
<u>Asset-Valuation Method</u>	Market Value of Assets as of the Measurement Date, June 30, 2023

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Employee Termination

It was assumed that employees would terminate employment in accordance with the sample rates shown in the following table:

Non-Public Safety Employees

Service	Male	Female
0	15.00%	15.00%
5	7.60%	7.60%
10	5.40%	5.40%
15	3.30%	3.30%
20	2.00%	2.00%

Public Safety Employees

Service	Male	Female
0	9.00%	9.00%
5	6.00%	6.00%
10	3.50%	3.50%
15	2.00%	2.00%
20	1.50%	1.50%
25	1.50%	1.50%
30	1.50%	1.50%

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Retirement Rates for Eligible Employees

Age	Standard Male	Standard Female	Male Teachers	Female Teachers	Public Safety
45 - 49	0.00%	0.00%	0.00%	0.00%	6.00%
50 - 51	3.00%	3.00%	2.00%	1.50%	6.00%
52	3.00%	3.00%	2.00%	1.50%	6.00%
53	3.00%	3.00%	2.00%	1.50%	7.50%
54	3.00%	3.50%	2.00%	2.00%	15.00%
55	3.50%	5.00%	6.00%	5.00%	25.00%
56	3.50%	5.00%	20.00%	15.00%	15.00%
57	4.00%	5.50%	40.00%	35.00%	15.00%
58	5.00%	6.00%	50.00%	35.00%	15.00%
59	6.00%	6.50%	50.00%	35.00%	15.00%
60	9.00%	7.50%	40.00%	35.00%	20.00%
61	11.00%	10.00%	40.00%	35.00%	20.00%
62	15.00%	15.00%	35.00%	35.00%	20.00%
63	15.00%	15.00%	35.00%	35.00%	20.00%
64	16.00%	15.00%	35.00%	35.00%	30.00%
65	20.00%	20.00%	35.00%	35.00%	50.00%
66	20.00%	20.00%	40.00%	35.00%	25.00%
67	20.00%	20.00%	40.00%	30.00%	25.00%
68	20.00%	20.00%	40.00%	30.00%	25.00%
69	20.00%	20.00%	40.00%	30.00%	25.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%	100.00%	100.00%

Permanent Disability Rates

Age	Standard	Teachers	Public Safety
20	0.01%	0.05%	0.20%
30	0.01%	0.07%	0.21%
40	0.07%	0.21%	0.71%
50	0.13%	0.42%	1.10%
60	0.12%	0.50%	0.80%

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Trend Rate

Medicare Part A & B Premiums & Penalties: Assumed to rise at the same rates as our Medical Plan trend assumption.

Medical & Dental Plans: Rates were developed using the SOA Getzen Model of Long-Run Medical Cost Trends with the following model input variables:

Inflation (CPI):	2.50%
Real GDP (per capita):	1.10%
Excess Medical Cost Growth:	1.10%
Expected Health Share of GDP in 2030:	21%
Health Share of GDP Resistance Point:	22.5%
Year for Limiting Cost Growth to GDP Growth:	2060

See below for a table of trend rates for select years:

Year	Rate
2021	9.00%
2022	8.00%
2023	6.50%
2024	5.00%
2025	4.96%
2026	4.92%
2027	4.88%
2028	4.84%
2029	4.81%
2030 - 2037	4.77%
2050	4.38%
2060+	3.63%

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Participation Rate

It was assumed that 80% of employees eligible to receive retirement benefits would enroll in the retiree medical plans upon retirement. For life insurance plans, it was assumed that 80% of eligible employees would elect coverage upon retirement.

Spouse Participation Rate

It was assumed that 80% of male employees and 70% of female employees who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement.

Medicare Eligibility

It was assumed that retirees who were over age 66 on the valuation date and were enrolled in an Active plan were ineligible for Medicare and all other participants would be eligible for Medicare at age 65, absent any information to the contrary.

Compensation Increases

3.00% per year.

Inflation Rate

2.50% per year.

COVID-19

We recognize that COVID-19 may impact plan experience. We have reviewed the assumptions used in this report. Based on the data that is currently available, we have not made any adjustments to these assumptions to reflect the impact of COVID-19. We will continue to monitor the impact of COVID-19 to determine if adjustments to valuation assumptions are warranted.

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Implicit Subsidy

The implicit subsidy arises because retirees who are not eligible for Medicare are charged the same premium as active employees, even though their actual medical costs are higher on average. Consequently, a portion of the premiums being paid for active employees are being used to “subsidize” the premiums of retirees. Actuarial Standards of Practice and GASB standards require the liability associated with this implicit subsidy to be valued. The chart below shows a breakdown of how implicit cost impacts reported cash flows and liabilities. Actuarial Standard of Practice No. 6 (“ASOP 6”) requires us to recognize this implicit subsidy while the plan sponsor may only pay the premiums billed by an insurance provider.

Impact of Implicit Subsidy		
	As of the Measurement Date	
Impact on Liability	June 30, 2023	June 30, 2022
I. Total OPEB Liability	83,514,065	90,558,732
II. Total OPEB Liability (Excluding Implicit Subsidy)	<u>67,619,815</u>	<u>70,519,328</u>
III. Liability from Implicit Subsidy [I. - II.]	15,894,250	20,039,404

	For the Measurement Period Ending	
Impact on Payments	June 30, 2023	June 30, 2022
IV. Employer Payments (Including Implicit Subsidy)	3,466,575	3,355,909
V. Actual Employer Payments	<u>2,956,460</u>	<u>2,737,986</u>
VI. Implicit Subsidy [IV. - V.]	510,115	617,923

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Pre-65 and post-65 per capita costs were developed using fully insured premium rates.

ANNUAL PER CAPITA CLAIMS*

ACTIVE EMPLOYEES			RETIREE - NOT MEDICARE ELIGIBLE			RETIREE - MEDICARE ELIGIBLE		
Age Bracket	Female	Male	Age Bracket	Female	Male	Age Bracket	Female	Male
24 & Under	4,555	2,871	44 & Under	8,952	5,866	65 to 69	2,913	2,991
25 to 29	6,719	2,988	45 to 49	9,833	7,406	70 to 74	3,435	3,583
30 to 34	8,491	3,750	50 to 54	11,568	9,755	75 to 79	3,986	4,232
35 to 39	8,746	4,708	55 to 59	13,372	12,681	80 to 84	4,572	4,864
40 to 44	8,952	5,866	60 to 64	15,913	16,273	85 to 89	5,111	5,418
45 to 49	9,833	7,406	65 to 69	19,075	20,299	90 & Over	5,111	5,418
50 to 54	11,568	9,755	70 to 74	22,494	24,326			
55 to 59	13,372	12,681	75 to 79	26,124	28,731			
60 to 64	15,913	16,273	80 to 84	29,953	33,023			
65 to 69	19,075	20,299	85 to 89	34,190	37,800			
70 & Over	22,494	24,326	90 & Over	34,190	37,800			

*Based on SOA 'Health Care Costs--From Birth to Death' study published in 2013

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Open Group Forecast

For the projection of plan liabilities in future years, it was assumed that the number of active employees will remain constant and those who terminate employment or retire will be replaced with new employees with the demographics below:

Open Group Forecast Population Demographics		
Age	Male	Female
20	8.0%	5.0%
30	7.0%	14.0%
40	20.0%	19.0%
50	10.0%	10.0%
60	<u>3.0%</u>	<u>4.0%</u>
Total	48.0%	52.0%

Additional Comments

The liabilities being reported as of the Measurement Date of June 30, 2023 reflect a closed group and do not reflect any new entrants after the valuation date.

To the best of our knowledge all employees who are eligible on the valuation date are included in the actuarial valuation.

APPENDIX IV – PLAN DEMOGRAPHICS

Active Employees

Valuation Date	July 1, 2022	July 1, 2020
A. Average Age at Hire	36.94	36.73
B. Average Service	<u>9.49</u>	<u>10.43</u>
C. Average Current Age	46.43	47.16

Retired Employees & Spouses

Valuation Date	July 1, 2022	July 1, 2020
A. Under Age 65	87	90
B. Age 65 & Over	<u>462</u>	<u>432</u>
C. Total	549	522

Average Service Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-24	22	2								24
25-29	37	4								41
30-34	31	25	3							59
35-39	35	17	13							65
40-44	23	17	12	21	2					75
45-49	22	27	14	18	7	1				89
50-54	23	19	11	14	17	7	2			93
55-59	25	15	14	9	15	7	3	1		89
60-64	8	13	7	15	2	7		2		54
65-69	4	4	2	2	2	2			1	17
70+	1	2	2						1	6
Total	231	145	78	79	45	24	5	3	2	612

APPENDIX IV – PLAN DEMOGRAPHICS

Plan Offerings

Number of Contracts

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
HMO Blue NE	118	17	180	315
PPO Blue	56	7	54	117
HMO Limited Network	12		5	17
Medex LIS	1			1
Medex	182	140		322
Total	369	164	239	772

Per Contract Costs (monthly)

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
HMO Blue NE	886.05	1,772.10	2,509.96
PPO Blue	1,028.89	2,057.78	2,966.45
HMO Limited Network	824.02	1,648.04	2,286.82
Medex LIS	307.47	614.94	
Medex	340.87	681.74	
Altus Dental	53.19	106.36	186.13

APPENDIX IV – PLAN DEMOGRAPHICS

	Active Plan Average Premium Calculation					
	Single	Two-Person	Family	Number of Participants	Total Premiums Paid	Claims Without Children
HMO Blue NE	118	17	180	512	7,037,668.80	5,443,891.20
PPO Blue	56	7	54	178	2,786,527.20	2,197,709.04
HMO Limited Network	12		5	22	255,868.08	217,541.28
Total	186	24	239	712	10,080,064.08	7,859,141.52
Blended Average Monthly Rate:						\$ 919.84

	Medicare Supplement Plan Average Premium Calculation					
	Single	Two-Person	Family	Number of Participants	Total Premiums Paid	Claims Without Children
Medex LIS	1			1	3,689.64	3,689.64
Medex	182	140		462	1,889,783.28	1,889,783.28
Total	183	140	0	463	1,893,472.92	1,893,472.92
Blended Average Monthly Rate:						\$ 340.80

APPENDIX V – OVERVIEW OF GASB 74 & 75

Before Statements 74 and 75, GASB statement 45 established the reporting standards for Other Postemployment Benefit (“OPEB”) plans. It was designed to recognize the Other Postemployment Benefits earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. “pay-as-you-go” accounting. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a “Service Cost”. These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment.

In 2012 GASB issued GASB Statements 67 and 68 to update and standardize the financial reporting of pension liabilities. This increased the transparency of pension liabilities by moving them to the balance sheet and made financial statement disclosures of pension liabilities more comparable between municipal entities. GASB Statements 74 and 75 are designed to have the same effect on OPEB plans.

GASB 74 and 75 require retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 74 only applies in situations where a separate trust is established to prefund these benefits. GASB 75 requires employers to perform periodic actuarial valuations to determine annual accounting costs and to keep a running tally of the extent to which these amounts are over or under funded.

GASB 74 and 75 apply to those benefits provided after retirement, except for pension benefits, such as medical, dental and life insurance. The philosophy behind the accounting standard is that these postemployment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 74 and 75 extend this practice to all other postemployment benefits.

APPENDIX V – OVERVIEW OF GASB 74 & 75

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

Turnover and retirement rates – How likely is it that an employee will qualify for postemployment benefits and when will they start?

Medical inflation and claims cost assumptions – When an employee starts receiving postemployment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption – How long is a retiree likely to receive benefits?

Discount rate assumption – What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the City, the present value is divided into three pieces: the part that is attributed to past years (the "Total OPEB Liability" or "Past Service Liability"), the part that is being earned this year (the "Service Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Service Cost have been calculated, the next step is to determine an actuarially determined contribution. This is an amount that if paid annually would fully prefund the benefits for current active and retired employees. This consists of two pieces:

- ✓ Service Cost – because the benefits earned by active employees each year should be paid for each year
- ✓ Past Service Cost – a catch-up payment to fund the Accrued Liability over a period of time determined by an actuary

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the City's financial statements as the Net OPEB Liability (NOL). If you decide to fully fund the NOL this will appear in the financial statement as a Net OPEB Asset. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

APPENDIX VI – ASOP 41 DISCLOSURES

The Actuarial Standards Board (the “ASB”), vested by the U.S.-based actuarial organizations¹, promulgates actuarial standards of practice (“ASOPs”) for use by actuaries when providing professional services in the United States. Each of these organizations requires its members, through its Code of Professional Conduct², to observe the ASOPs of the ASB when practicing in the United States.

The ASOPs are not narrowly prescriptive and neither dictate a single approach nor mandate a particular outcome. ASOPs are intended to provide actuaries with a framework for performing professional assignments and to offer guidance on relevant issues, recommended practices, documentation, and disclosure. Each ASOP articulates a process of analysis, documentation, and disclosure that, in the ASB’s judgment, constitutes appropriate practice within the scope and purpose of the ASOP.

ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in this Appendix.

Identification of the Responsible Actuary

The responsible actuary is Parker Elmore, ASA, EA, FCA, MAAA of Odyssey Advisors. This actuary is available to provide supplementary information and explanation.

Identification of Actuarial Documents

The date of this document is November 14, 2023 and its subject is the City of Newburyport's GASB 75 OPEB liabilities.

¹ The American Academy of Actuaries (the “Academy”), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

² These organizations adopted identical *Codes of Professional Conduct* effective January 1, 2001

APPENDIX VI – ASOP 41 DISCLOSURES

Disclosures in Actuarial Reports

- ✓ The contents of this report are intended for the use of the officers, employees, and elected officials of the City and the City’s appointed auditor. The City may distribute this report to those parties that have a legal right to require the City to provide it, in which case it will be provided in its entirety including all assumptions, caveats, and limitations. In addition, we request that the City notify Odyssey Advisors to whom it was distributed.
- ✓ The purpose of this engagement was to provide the City with analysis of the GASB 75 OPEB liabilities.
- ✓ The responsible actuary identified above is qualified as specified in the Qualification Standards of the American Academy of Actuaries.
- ✓ Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.
- ✓ Actuarial computations under GASB 75 are for purposes of fulfilling financial accounting requirements of the City. Determinations for purposes other than meeting these financial accounting requirements may be significantly different from the results contained in this report. These communications should not be relied upon for any other purpose.
- ✓ The City of Newburyport has agreed to pay Odyssey Advisors a fee for preparing this report. Other than with regard to that contract, we are financially and organizationally independent from the City and any entity or individual related to the City. There is nothing in our relationship with the City that would impair or seem to impair the objectivity of our work.
- ✓ The City provided the employee/retiree data, premium rates and other information used to prepare our report. We have reviewed the data for reasonableness but have not audited it. To the extent that there are material inaccuracies in the data, our results may be accordingly affected.
- ✓ The date through which data or other information has been considered in developing the findings included in this report is June 30, 2023.
- ✓ The various documents comprising the actuarial report are contained within the document to which these disclosures are attached.

APPENDIX VI – ASOP 41 DISCLOSURES

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

Actuarial Findings

The actuarial findings of the report can be found in the report to which these disclosures are attached.

Methods, Procedures, Assumptions, and Data

The methods, procedures, assumptions and data used by the actuary can be found in the report to which these disclosures are attached.

Assumptions or Methods Prescribed by Law

While not legally binding, our determinations were made in accordance with our understanding of Statement No. 75 of the Governmental Accounting Standards Board. Actuarial computations under GASB 75 are for purposes of fulfilling employer accounting requirements. Determinations for purposes other than meeting such requirements may be significantly different from these results. Accordingly, additional determinations may be needed for other purposes.

Responsibility for Assumptions and Methods

The actuary does not disclaim responsibility for any material assumption(s) or method(s).

Deviation from the Guidance of an ASOP

The actuary has not deviated materially from the guidance set forth in an applicable ASOP.

Rounding

Results in this report are shown to the nearest dollar. Due to the predictive nature of these results, no implication is made as to the degree of precision in these unrounded figures. Clients should work with their auditors to decide if it would be prudent to round these results when applying them to the financial statements.

GLOSSARY

Accrual Accounting – A system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time.

Actuarially Determined Contribution – Amount of funding required annually to fully fund plan benefits. Determined by the actuary using a consistent methodology.

Amortization – Allows the recognition of liability over a fixed period of time.

Cash Basis Accounting – A system of accounting in which revenues are recorded when received and outlays are recorded when payment is made.

Deferred Inflows/Outflows of Resources – Amounts arising from experience gains and losses that have not been recognized into the OPEB Expense but will be recognized in the future.

Discount Rate – The interest rate used to calculate the present value of future cash flows. Under GASB 75, the rate should be the expected long-term rate of return on investments for a plan that is being fully funded, the 20-year municipal bond index for a pay-as-you-go plan, and a blend of the two rates for a plan that is being partially funded.

Entry Age Normal – Under this method, the annual service cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement. The annual service cost for each active member is a level percent of payroll. The total OPEB liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

Fiduciary Net Position – The value of cash, investments, other assets and property belonging to an OPEB trust.

GLOSSARY

Government Accounting Standards Board (GASB) – “The Governmental Accounting Standards Board (GASB) was organized in 1984 by the Financial Accounting Foundation (FAF) to establish standards of financial accounting and reporting for state and local governmental entities. Its standards guide the preparation of external financial reports of those entities.”

Implicit Subsidy – The liability that arises because retirees who are not eligible for Medicare are charged the same premium as active employees even though their actual medical costs are higher on average.

Irrevocable Contribution – The transfer of assets to a qualified trust in which assets may only be withdrawn for the purpose of providing retiree other postemployment benefits.

Net OPEB Liability (NOL) – Total OPEB Liability less the Fiduciary Net Position.

Other Postemployment Benefits (OPEB) – Benefits that an employee will begin to receive at the start of retirement. This does not include pension benefits paid to the retired employee.

OPEB Trust – An entity which holds assets for the sole purpose of funding OPEB. All contributions and earnings within this entity must be irrevocable and protected from creditors.

Pay-as-you-go funding – Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

Service Cost – The actuarially determined present value contribution needed to fund benefits which are earned for employee service rendered during the current year. Service cost depends on many factors, including the interest rate used to discount future cashflows, and expected inflation.

Total OPEB Liability (TOL) – That portion, as determined by the Individual Entry Age Normal Actuarial Cost Method, of the Actuarial Present Value of benefits and expenses which are not provided for by future Service Costs.