



TOWN OF SOUTHBOROUGH, MASSACHUSETTS

OTHER POSTEMPLOYMENT BENEFITS PROGRAM

FINANCIAL REPORTING AND DISCLOSURES
Governmental Accounting Standards Board
Statements 74 and 75

Disclosures as of
June 30, 2024

KMS Actuarial, LLC
52 Hunt Road
Kingston, NH 03848

October, 2024



October 25, 2024

Mr. Brian Ballantine
Treasurer-Collector
Town of Southborough
17 Common Street
Southborough, MA 01772

Dear Brian:

We are pleased to present the enclosed report of the July 1, 2022 actuarial valuation of the retiree health care benefits for the Town of Southborough. The valuation was prepared in accordance with and for the purpose of financial reporting and disclosures as of June 30, 2024 under the following Governmental Accounting Standards Board (GASB) Statements:

- ◆ GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB 74)
- ◆ GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75)

Results are based on liabilities developed in an actuarial valuation performed as of July 1, 2022 and rolled forward to the plan's measurement date of June 30, 2024.

The Principal Valuation Results, including assets, liabilities and the development of future contributions, are provided in Section 1. The Notes to the Financial Statements and the Required Supplementary Information are provided in Sections 2 and 3, respectively. Employer Reporting Amounts under GASB 75 are provided in Section 4. The Summary of Plan Provisions and Actuarial Assumptions and Methods are shown in Sections 5 and 6, respectively. Section 7 summarizes the demographic profile of active members and retired members, covered spouses and survivors. Finally, a Glossary of Terms is provided in Section 8.

Our calculations are based on member census data and other information provided by the Town of Southborough as well as health plan rates provided by the Town. Although we did not audit the data used in the valuation and disclosure calculations, we believe that the information is complete and reliable.

Liabilities presented in this report are based on a discount rate of 6.48%, the rate that reflects a blended-rate of the long-term expected rate of return on OPEB plan assets and the municipal bond rate. The municipal bond rate of 3.93% is based on the Bond Buyer 20-Bond GO Index published on June 30, 2024. The long-term expected rate of return is 6.5%. The long-term expected rate of return is based on the target allocations provided in the investment policy statement and long-term expected rates of return by asset class provided by Bartholomew & Company.

This report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Code of Professional Conduct of the American Academy of Actuaries. The actuarial assumptions other than those explicitly applicable to the postemployment benefit plans are consistent with those used by the Worcester Regional and Massachusetts Teachers Retirement Systems' actuaries for the Retirement System pension valuations.

Future actuarial valuation results may differ significantly from the current results presented in this report. Examples of potential sources of volatility include plan experience differing from that anticipated by the economic or demographic assumptions, the effect of new entrants, changes in economic or demographic assumptions, the effect of law changes and the delayed effect of smoothing techniques. The potential range of future measurements was not assessed as it was outside the scope of the project.

Our valuation follows generally accepted actuarial methods and we perform such tests as we consider necessary to assure the accuracy of the results. The amounts presented in this report have been appropriately determined according to the actuarial assumptions and methods stated herein.

This valuation report is intended for the sole use of the Town of Southborough and may only be provided to other parties in its entirety, unless expressly authorized by KMS Actuaries. Further, it is intended to provide information to comply with the stated purpose of the report. It may not be appropriate for other purposes.

KMS Actuaries is completely independent of the Town of Southborough and any of its officers or key personnel. None of the actuaries signing this report or anyone closely associated with them has a relationship with the Town of Southborough, other than as consulting actuary for this assignment, that would impair our independence.

Mr. Brian Ballantine

October 25, 2024

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The expected claims, cost trend rates, and analysis of regulatory changes have been developed based on the expertise of the undersigned health and welfare actuary, Christopher E. Bean, ASA, MAAA. All other assumptions and methods have been selected based on the expertise of the undersigned pension actuaries, Linda L. Bournival, FSA, EA and Amanda J. Makarevich, FSA.

The undersigned credentialed actuaries agree that the analysis, assumptions and results are overall reasonable. They are Members of the American Academy of Actuaries and together meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein. They are available to answer any questions with regard to this report.

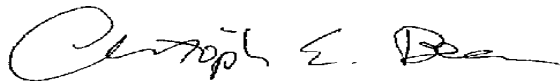
Respectfully submitted,



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EXECUTIVE SUMMARY

Purpose of Report

This report presents the results of the actuarial valuation of the Town of Southborough's retiree health care benefits as of July 1, 2022. The valuation was prepared in accordance with and for the purpose of financial reporting and disclosures as of June 30, 2024 under the following Governmental Accounting Standards Board (GASB) Statements:

- ◆ GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB 74)
- ◆ GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75)

The results as of the measurement date are based on a roll forward of the liabilities developed in the most recent actuarial valuation.

GASB Accounting Standards

In June 2015, the GASB approved two related Statements that significantly changed the way other postemployment benefits (OPEB) plans and governments account and report OPEB liabilities. GASB Statement No. 74 (GASB 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, replaced the requirements of Statement No. 43 and GASB Statement No. 75 (GASB 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, replaced the requirements of Statement No. 45.

The effective date for GASB 74 is for plan years beginning after June 15, 2016, which is the plan year ending June 30, 2017 for the Town of Southborough. The effective date for GASB 75 is for fiscal years beginning after June 15, 2017, which is the fiscal year ending June 30, 2018 for the Town of Southborough.

GASB 74 requires OPEB plans to present a statement of fiduciary net position (OPEB plan assets) and a statement of changes in fiduciary net position. Further, the statement requires that notes to financial statements include descriptive information such as the types of benefits provided, the classes of plan members covered and the authority under which benefit terms are established or may be amended. Finally, GASB 74 requires OPEB plans to present in required supplementary information the sources of the changes in the net OPEB liability and information about the actuarially determined contributions compared with the actual contributions made to the plan and related ratios.

GASB 74 and GASB 75 require projected benefit payments be discounted to their actuarial present value using the single rate that reflects (1) a long-term expected rate of return on OPEB plan investments to the extent that the OPEB plan's assets are sufficient to pay benefits and OPEB plan assets are expected to be invested using a strategy to achieve that return and (2) a tax-exempt, high-quality municipal bond rate to the extent that the conditions for use of the long-term expected rate of return are not met.

GASB 75 establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources and OPEB expense by state and local governments.

EXECUTIVE SUMMARY

Town of Southborough Other Postemployment Benefits Program

The Town of Southborough administers the retiree health care benefits program - a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent full-time employees. The Town provides health care benefits for retirees and their dependents. Benefits are provided through the Town, and the full cost of benefits is shared between the Town and retirees.

Summary of Principal Results

A summary of principal results from the current and prior measurement dates follows:

Measurement Date	June 30, 2024	June 30, 2023	% Change
Valuation Date	July 1, 2022	July 1, 2022	
Membership Data			
Active Plan Members	372	350	6.3%
Inactive Plan Members (excludes covered spouses)	207	193	7.3%
Total Plan Members	579	543	6.6%
Covered Spouses	99	116	
Covered Payroll	\$26,886,132	\$26,232,855	2.5%
Net OPEB Liability			
Discount Rate	6.48%	5.59%	
Total OPEB Liability (TOL)	\$42,361,823	\$45,281,382	(6.4%)
Fiduciary Net Position (FNP)	\$3,681,665	\$3,036,428	21.2%
Net OPEB Liability	\$38,680,158	\$42,244,954	(8.4%)
FNP as % of TOL	8.7%	6.7%	
OPEB Expense			
OPEB Expense	\$3,806,603	(\$4,516,094)	
Deferred Outflows	\$10,031,648	\$13,021,798	
Deferred Inflows	\$9,519,713	\$6,999,040	
Recognition Period (Years)	7.19	7.19	

EXECUTIVE SUMMARY

Demographic Experience Gain and Loss

In developing the Total OPEB Liability, various assumptions are made regarding future premium rates, mortality, retirement, disability and turnover rates. A comparison of the results of the current and prior measurements is made to determine how closely actual experience relates to expected. For the current measurement period, there is no experience gain or loss as the Total OPEB liability was developed from a roll forward of results of the most recent valuation.

OPEB Plan Investments Gain and Loss

Projected Earnings during the measurement period, shown in Exhibit 1.1, are developed on the OPEB Plan Investments using the prior long-term rate of return assumption and are compared to actual earnings. As shown in Exhibit 1.1, the gain of \$199,335 is the difference in the projected earnings of \$195,902 and actual earnings of \$395,237.

Changes of Assumptions

The discount rate changed from 5.59% as of June 30, 2023 to 6.48% as of June 30, 2024.

◆ Decrease due to change in Discount Rate	(5,416,000)
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All of the assumptions used in this valuation are shown in Section 6, Actuarial Assumptions and Methods.

Changes of Benefit Terms

All benefit terms are the same as those used in the prior measurement. A Summary of the Principal Plan Provisions is provided in Section 5.

Total OPEB Liability

The Total OPEB Liability as of the current measurement date, June 30, 2024, is \$42,361,823. The Total OPEB Liability as of the prior measurement date, June 30, 2023, was \$45,281,382. During the current measurement period ending June 30, 2024, the Total OPEB Liability decreased by \$2,919,559, or -6.4%. The development of the Total OPEB Liability for the current measurement period is shown in Section 1, Exhibit 1.2.

Fiduciary Net Position

The Fiduciary Net Position is equal to the market value of assets and as of the current measurement date, June 30, 2024, is \$3,681,665. The Fiduciary Net Position as of the prior measurement date, June 30, 2023, was \$3,036,428. During the plan years ended June 30, 2024 and June 30, 2023, the actual rates of return were 12.11% and 7.92%, respectively. The expected long-term rate of return is 6.50%. The Fiduciary Net Position is shown in Section 1, Exhibit 1.1.

Employer Future Period Contributions

The Town is expected to contribute \$250,000 annually until their pension system is fully funded in 2036. Given the COVID-19 situation and market volatility, it was assumed the Town will reallocate the funds used to pay the pension amortization towards OPEB beginning in 2037.

EXECUTIVE SUMMARY

Discount Rate

As of the June 30, 2024 measurement date, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to 98 years of projected future benefit payments that are expected to be fully funded and the 3.93% municipal bond rate was applied to the unfunded portion of projected future benefit payments in all other years to determine the total OPEB liability. Projected benefit payments are discounted to their actuarial present value using a single discount rate of 6.48%.

OPEB Expense

The OPEB Expense for the current measurement period ending June 30, 2024, is \$3,806,603. Benefit changes are recognized immediately and experience gains and losses and assumption changes developed in this valuation are recognized over 7.19 years. Investment gains and losses are recognized over 5 years. The OPEB Income for the prior measurement period was \$4,516,094. The development of the OPEB expense for the current measurement period is shown in Section 4, Exhibit 4.2.

SECTION 1 - PRINCIPAL VALUATION RESULTS

Exhibit 1.1 - OPEB Trust Assets

The Town has established an irrevocable trust pursuant to Section 20 of Massachusetts General Law Chapter 32B for the purpose of accumulating assets to prefund the OPEB liabilities. Plan assets segregated and restricted in an OPEB trust must be dedicated to providing plan benefits to retirees and beneficiaries in accordance with the terms of the plan and must be legally protected from creditors of the employer. Further, contributions from employers to the OPEB trust and earnings on those contributions must be irrevocable. Asset information for the current and prior fiscal years was provided by the Town and is presented below:

Fiscal Year Ended June 30 **2024** **2023**

Trust Fund Composition at Fiscal Year-End		
Domestic Equity	1,592,494	1,281,871
International Equity	825,599	646,185
Domestic Bonds	487,863	550,072
International Bonds	84,628	131,157
Alternatives	673,803	420,880
Cash	17,278	6,263
Total Market Value of Assets	3,681,665	3,036,428

Asset Activity		
Market value, beginning of year	\$3,036,428	\$2,565,167
Employer Premiums	1,610,576	1,509,778
OPEB Trust Contributions	250,000	250,000
Benefit Payments	(1,610,576)	(1,509,778)
Administrative Expenses	-	-
Investment Return	395,237	221,261
Market value, end of year	\$3,681,665	\$3,036,428

Money-Weighted Rate of Return	12.11%	7.92%
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(Gain) / Loss on OPEB Plan Investments		
Projected earnings	\$195,902	\$185,782
Actual earnings	395,237	221,261
(Gain) / Loss on OPEB plan investments	(\$199,335)	(\$35,479)

SECTION 1 - PRINCIPAL VALUATION RESULTS

Exhibit 1.2 - Total OPEB Liability

The Total OPEB Liability, developed using the Entry Age Normal funding method, is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service. The total OPEB liability as of the June 30, 2024 measurement date was developed from an actuarial valuation as of July 1, 2022 and rolled forward to the OPEB plan's fiscal year-end.

The Service Cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year. Only active employees who have not reached the age at which the probability of retirement is 100% incur a service cost.

Actuarial experience gains and losses arise from the difference between expected and actual experience, excluding amounts related to benefit changes and changes in assumptions or other inputs.

The development of the Total OPEB Liability from the beginning of the measurement period, June 30, 2023 to the end of the measurement period, June 30, 2024 is shown below:

Measurement Date	June 30, 2024
1. Total OPEB Liability, beginning of year:	
a. Actives	\$27,101,663
b. Retirees, Covered Spouses and Survivors	18,179,719
c. Total OPEB Liability at 5.59% (a. + b.)	\$45,281,382
2. Service Cost	\$1,534,959
3. Expected Benefit Payments	
a. Current retirees	(\$1,417,288)
b. Future retirees	(193,288)
c. Total (a. + b.)	(\$1,610,576)
4. Interest [5.59% x (1.c. + 2. + .5 x 3.c)]	\$2,572,018
5. Changes of benefit terms	\$0
6. Differences between expected and actual experience	\$0
7. Changes of assumptions or other inputs	(\$5,415,960)
8. Total OPEB Liability, end of year (1.c. + 2. + 3.c. + 4. + 5. + 6. + 7.)	
a. Actives	\$26,124,066
b. Retirees, Covered Spouses and Survivors	16,237,757
c. Total OPEB Liability at 6.48% (a. + b.)	\$42,361,823

SECTION 1 - PRINCIPAL VALUATION RESULTS

Exhibit 1.3 - Development of Actuarially Determined Employer Contributions

The Town is expected to contribute \$250,000 annually until their pension system is fully funded in 2036. Given the COVID-19 situation and market volatility, it was assumed the Town will reallocate the funds used to pay the pension amortization towards OPEB beginning in 2037.

The Actuarially Determined Employer Contribution (ADEC) equals the Normal Cost plus a provision for amortizing the Unfunded Actuarial Accrued Liability. We have assumed level dollar amortization over an amortization period of 30 years.

Fiscal Year Ending	June 30, 2024	June 30, 2025
Discount Rate	5.59%	6.48%
1. Normal Cost	\$1,534,959	\$1,275,887
2. Unfunded Actuarial Accrued Liability		
a. Actuarial Accrued Liability	\$45,281,382	\$42,361,823
b. Actuarial Value of Plan Assets	\$3,036,428	\$3,681,665
c. Unfunded Actuarial Accrued Liability (a. - b.)	\$42,244,954	\$38,680,158
3. Amortization of Unfunded Actuarial Accrued Liability		
a. Unfunded Actuarial Accrued Liability	\$42,244,954	\$38,680,158
b. Amortization Period in years	30	30
c. Payroll Growth Rate	0.0%	0.0%
d. Amortization Factor	15.19	13.93
e. Amortization Amount (3.a. / 3.d.)	\$2,781,103	\$2,776,752
4. Interest on 1. and 3.e.	\$241,268	\$262,611
5. Actuarially Determined Employer Contribution (1. + 3.e. + 4.)	\$4,557,330	\$4,315,250
6. Actual Employer Contribution to OPEB Trust	\$250,000	TBD
7. Expected Benefit Payments	\$1,610,576	
8. Total Contribution (6. + 7.)	\$1,860,576	

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Exhibit 2.1 - Plan Description

Plan Administration

The Town of Southborough administers the retiree health care benefits program - a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent full-time employees.

Plan Membership

At June 30, 2024, OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments ¹	207
Inactive plan members entitled to but not yet receiving benefit payments	0
Active plan members	372
	<u>579</u>

¹Per paragraph 34a of GASB 74 and further clarified by Question 4.67 of the 2017-2 GASB 74 Implementation Guide, the total shown for inactive plan members or beneficiaries currently receiving benefit payments does not include covered spouses or other dependents.

Benefits Provided

The Town provides health care benefits for retirees and their dependents. Benefits are provided through the Town, and the full cost of benefits is shared between the Town and retirees.

Employer Future Period Contributions

The Town is expected to contribute \$250,000 annually until their pension system is fully funded in 2036. Given the COVID-19 situation and market volatility, it was assumed the Town will reallocate the funds used to pay the pension amortization towards OPEB beginning in 2037.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Exhibit 2.2 - Net OPEB Liability

The components of the net OPEB liability at June 30, 2024, were as follows:

Total OPEB liability	\$	42,361,823
Fiduciary net position		(3,681,665)
Net OPEB liability	\$	38,680,158

Fiduciary net position as a percentage of the total OPEB liability 8.69%

Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of July 1, 2022, rolled forward to the measurement date and using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5% per year, based on current economic data, analyses from economists and other experts, and professional judgement.
Discount rate	6.48%, net of investment expenses, including inflation.
Healthcare cost trend rate	8% for 2022, decreasing 0.5% per year to 6%, then grading down to an ultimate trend rate of 4.1%, utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate medical trend rate is reached in 2075.
Pre-Retirement Mortality - General and Public Safety employees	RP-2014 Blue Collar Employees Mortality Table, projected with generational mortality improvement using scale MP-2020.
Healthy Retiree Mortality - General and Public Safety employees	RP-2014 Blue Collar Healthy Annuitant Mortality Table, projected with generational mortality improvement using scale MP-2020.
Disabled Retiree Mortality - General and Public Safety employees	RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2020.
Pre-Retirement Mortality - Teachers	PUB-2010 Teachers Headcount-Weighted Employee Mortality Table, base year 2010, projected with generational mortality improvement using Scale MP-2021.
Healthy Retiree Mortality - Teachers	PUB-2010 Teachers Headcount-Weighted Retiree Mortality Table, base year 2010, projected with generational mortality improvement using Scale MP-2021.
Disabled Retiree Mortality - Teachers	PUB-2010 Teachers Headcount-Weighted Retiree Mortality Table, base year 2010, projected with generational mortality improvement using Scale MP-2021.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Exhibit 2.2 - Net OPEB Liability

Long-Term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage provided in the investment policy statement and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of June 30, 2024 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rates of Return ¹
Domestic Equity	38%	4.24%
International Equity	26%	5.34%
Domestic Bonds	13%	1.84%
International Bonds	3%	1.68%
Private Equity	8%	7.90%
Real Estate	2%	1.50%
Other Alternatives	10%	5.10%
Total	100%	

¹ provided by Bartholomew & Company.

Discount Rate

The discount rate used to measure the total OPEB liability was 6.48%. The projection of cash flows used to determine the discount rate assumed that contributions from the Town will be made in accordance with the plan's funding policy. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to 98 years of projected future benefit payments that are expected to be fully funded and the 3.93% municipal bond rate was applied to the unfunded portion of projected future benefit payments in all other years to determine the total OPEB liability.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Exhibit 2.2 - Net OPEB Liability

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability calculated using the current discount rate of 6.48 percent, as well as what the net OPEB liability would be if it were calculated using a discount rate 1-percentage point lower (5.48 percent) or 1-percentage point higher (7.48 percent) than the current rate:

	1% Decrease (5.48%)	Assumed Discount Rate (6.48%)	1% Increase (7.48%)
Total OPEB Liability	\$ 48,520,231	\$ 42,361,823	\$ 37,335,831
Fiduciary Net Position	(3,681,665)	(3,681,665)	(3,681,665)
Net OPEB Liability	\$ 44,838,566	\$ 38,680,158	\$ 33,654,166
% Change in NOL	15.9%		-13.0%

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB liability calculated using the current healthcare cost trend rates as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage point lower (7% year 1 decreasing to 3.1%) or 1-percentage point higher (9% year 1 decreasing to 5.1%) than the current healthcare cost trend rates:

	1% Decrease 7% Year 1 Decreasing to 3.1%	Assumed Healthcare Cost Trend Rates 8% Year 1 Decreasing to 4.1%	1% Increase 9% Year 1 Decreasing to 5.1%
Total OPEB Liability	\$ 36,139,046	\$ 42,361,823	\$ 50,200,411
Fiduciary Net Position	(3,681,665)	(3,681,665)	(3,681,665)
Net OPEB Liability	\$ 32,457,381	\$ 38,680,158	\$ 46,518,746
% Change in NOL	-16.1%		20.3%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios

Fiscal Year Ended June 30	2024	2023	2022	2021	2020
Total OPEB Liability					
Service cost	\$ 1,534,959	\$ 1,628,317	\$ 1,683,692	\$ 931,942	\$ 889,551
Interest	2,572,018	3,051,857	2,865,258	2,182,825	2,206,645
Changes of benefit terms	-	(9,856,769)	-	-	-
Differences between expected and actual experience	-	(2,082,982)	-	6,649,997	(3,592,503)
Changes of assumptions	(5,415,960)	4,480,246	(3,204,882)	8,145,723	83,922
Benefit payments	(1,610,576)	(1,509,778)	(1,604,815)	(1,458,469)	(1,231,651)
Net change in total OPEB liability	\$ (2,919,559)	\$ (4,289,109)	\$ (260,747)	\$ 16,452,018	\$ (1,644,036)
Total OPEB liability—beginning	\$ 45,281,382	\$ 49,570,491	\$ 49,831,238	\$ 33,379,220	\$ 35,023,256
Total OPEB liability—ending (a)	\$ 42,361,823	\$ 45,281,382	\$ 49,570,491	\$ 49,831,238	\$ 33,379,220
Plan Fiduciary Net Position					
Contributions—employer	\$ 1,860,576	\$ 1,759,778	\$ 1,854,815	\$ 1,708,469	\$ 1,481,651
Net investment income	395,237	221,261	(399,465)	609,270	35,991
Benefit payments	(1,610,576)	(1,509,778)	(1,604,815)	(1,458,469)	(1,231,651)
Administrative expenses	-	-	-	-	-
Other	-	-	-	-	-
Net change in plan fiduciary net position	\$ 645,237	\$ 471,261	\$ (149,465)	\$ 859,270	\$ 285,991
Plan fiduciary net position—beginning	\$ 3,036,428	\$ 2,565,167	\$ 2,714,632	\$ 1,855,362	\$ 1,569,371
Plan fiduciary net position—ending (b)	\$ 3,681,665	\$ 3,036,428	\$ 2,565,167	\$ 2,714,632	\$ 1,855,362
Net OPEB liability—ending (a) – (b)	\$ 38,680,158	\$ 42,244,954	\$ 47,005,324	\$ 47,116,606	\$ 31,523,858
Plan fiduciary net position as a percentage of the total OPEB liability	8.69%	6.71%	5.17%	5.45%	5.56%
Covered payroll	\$ 26,886,132	\$ 26,232,855	\$ 25,627,949	\$ 24,234,544	\$ 23,409,824
Net OPEB liability as a percentage of covered payroll	143.87%	161.04%	183.41%	194.42%	134.66%
Discount Rate	6.48%	5.59%	6.05%	5.65%	6.50%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios, continued

Fiscal Year Ended June 30	2019	2018	2017	2016	2015
Total OPEB Liability					
Service cost	\$ 1,102,359	\$ 1,408,106	\$ 1,414,513		
Interest	1,984,110	1,894,830	1,255,435		
Changes of benefit terms	-	-	-		
Differences between expected and actual experience	-	2,242,713	6,017,400		
Changes of assumptions	(6,007,783)	-	-		
Benefit payments	(1,255,235)	(1,169,027)	(688,801)		
Net change in total OPEB liability	\$ (4,176,549)	\$ 4,376,622	\$ 7,998,547		
Total OPEB liability—beginning	\$ 39,199,805	\$ 34,823,183	\$ 26,824,636		
Total OPEB liability—ending (a)	\$ 35,023,256	\$ 39,199,805	\$ 34,823,183		
Plan Fiduciary Net Position					
Contributions—employer	\$ 1,505,235	\$ 1,419,027	\$ 938,801		
Net investment income	78,416	66,625	67,927		
Benefit payments	(1,255,235)	(1,169,027)	(688,801)		
Administrative expenses	-	-	-		
Other	-	-	-		
Net change in plan fiduciary net position	\$ 328,416	\$ 316,625	\$ 317,927		
Plan fiduciary net position—beginning	\$ 1,240,955	\$ 924,330	\$ 606,403		
Plan fiduciary net position—ending (b)	\$ 1,569,371	\$ 1,240,955	\$ 924,330		
Net OPEB liability—ending (a) – (b)	\$ 33,453,885	\$ 37,958,850	\$ 33,898,853		
Plan fiduciary net position as a percentage of the total OPEB liability	4.48%	3.17%	2.65%		
Covered payroll	\$ 22,223,655	\$ 21,576,364	\$ 19,326,334		
Net OPEB liability as a percentage of covered payroll	150.53%	175.93%	175.40%		
Discount Rate	6.25%	5.00%	4.50%		

Note: Only 8 years are presented here and on the previous page, beginning with the year of implementation; 10 years of information will be required.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios, continued

Notes to Schedule

Changes of Benefit Terms

All benefit terms are the same as those used in the prior measurement.

Changes of Assumptions

The discount rate changed from 5.59% as of June 30, 2023 to 6.48% as of June 30, 2024.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.2 - Investment Returns

Fiscal Year Ended June 30	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expenses	12.11%	7.92%	-13.56%	29.26%	2.00%	5.34%	6.76%	8.37%		

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of OPEB plan investments by the proportion of time they are available to earn a return during that period. The rate of return is then calculated by solving, through an iterative process, for the rate that equates the sum of the weighted external cash flows into and out of the OPEB plan investments to the ending fair value of OPEB plan investments.

Note: Only 8 years are presented here, beginning with the year of implementation; 10 years of information will be required.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.2 - Investment Returns

Calculation of Money-Weighted Rate of Return

	Plan Investments/ Net External Cash Flows (a)	Periods Invested (b)	Period Weight (c)=(b)÷12	(d)=(a) x (1+r _{mw}) ^(c)
Beginning value - July 1, 2023	\$ 3,036,428	12	1.00	\$ 3,404,053
Monthly net external cash flows:				
July	250,000	11	0.92	277,611
August	-	10	0.83	-
September	-	9	0.75	-
October	-	8	0.67	-
November	-	7	0.58	-
December	-	6	0.50	-
January	-	5	0.42	-
February	-	4	0.33	-
March	-	3	0.25	-
April	-	2	0.17	-
May	-	1	0.08	-
June	-	0	0.00	-
Ending value - June 30, 2024				\$ 3,681,665
Money-weighted rate of return:				12.11%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.3 - Schedule of Employer Contributions

Fiscal Year Ended June 30	2024	2023	2022	2021	2020
Actuarially determined contribution	\$ 4,557,330	\$ 5,159,967	\$ 5,075,423	\$ 3,406,099	\$ 3,156,233
Contributions in relation to the actuarially determined contribution	<u>1,860,576</u>	<u>1,759,778</u>	<u>1,854,815</u>	<u>1,708,469</u>	<u>1,481,651</u>
Contribution deficiency (excess)	<u>\$ 2,696,754</u>	<u>\$ 3,400,189</u>	<u>\$ 3,220,608</u>	<u>\$ 1,697,630</u>	<u>\$ 1,674,582</u>
Covered payroll	\$ 26,886,132	\$ 26,232,855	\$ 25,627,949	\$ 24,234,544	\$ 23,409,824
Contributions as a percentage of covered payroll	6.92%	6.71%	7.24%	7.05%	6.33%
Discount rate	5.59%	6.05%	5.65%	6.50%	6.25%
Inflation	2.50%	2.50%	2.40%	2.20%	2.50%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.3 - Schedule of Employer Contributions, continued

Fiscal Year Ended June 30	2019	2018	2017	2016	2015
Actuarially determined contribution	\$ 3,451,305	\$ 3,135,467	\$ 2,954,779		
Contributions in relation to the actuarially determined contribution	1,505,235	1,419,027	938,801		
Contribution deficiency (excess)	\$ 1,946,070	\$ 1,716,440	\$ 2,015,978		
Covered payroll	\$ 22,223,655	\$ 21,576,364	\$ 19,326,334		
Contributions as a percentage of covered payroll	6.77%	6.58%	4.86%		
Discount rate	5.00%	4.50%	Not available		
Inflation	Not available	Not available	Not available		

Note: Only 8 years are presented here and on the previous page, beginning with the year of implementation; 10 years of information will be required.

Notes to Schedule

Valuation Date

Actuarially determined contributions are determined as of July 1, one year prior to the end of the fiscal year in which contributions are reported.

Methods and Assumptions as of Current Measurement Date

Actuarial cost method	Entry Age Normal
Amortization method	Level dollar amount over 30 years on an open amortization period for partial pre-funding.
Amortization period	30 years
Asset valuation method	Market value
Healthcare cost trend rates	8% for 2022, decreasing 0.5% per year to 6%, then grading down to an ultimate trend rate of 4.1%, utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate medical trend rate is reached in 2075.

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from differences between expected and actual experience are recognized in OPEB Expense over the average expected remaining service life of all active and inactive participants.

				Balances at June 30, 2024	
	Experience Losses	Experience Gains	Amounts Recognized in OPEB Expense through June 30, 2024	Deferred Outflows of Resources	Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)
2018	\$ 2,242,713	\$ -	\$ 2,242,713	\$ -	\$ -
2019	-	-	-	-	-
2020	-	3,592,503	(2,680,970)	-	911,533
2021	6,649,997	-	3,604,336	3,045,661	-
2022	-	-	-	-	-
2023	-	2,082,982	(579,410)	-	1,503,572
2024	-	-	-	-	-
Total				<u>\$ 3,045,661</u>	<u>\$ 2,415,105</u>

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from changes of assumptions are recognized in OPEB Expense over the average expected remaining service life of all active and inactive participants.

					Balances at June 30, 2024
	Increases in the Total OPEB Liability	Decreases in the Total OPEB Liability	Amounts Recognized in OPEB Expense through June 30, 2024	Deferred Outflows of Resources	Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)
2018	\$ -	\$ -	\$ -	\$ -	\$ -
2019	-	6,007,783	(5,503,315)	-	504,468
2020	83,922	-	62,632	21,290	-
2021	8,145,723	-	4,415,028	3,730,695	-
2022	-	3,204,882	(1,302,798)	-	1,902,084
2023	4,480,246	-	1,246,244	3,234,002	-
2024	-	5,415,960	(753,263)	-	4,662,697
Total				<u>\$ 6,985,987</u>	<u>\$ 7,069,249</u>

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from differences between projected and actual earnings on OPEB Plan investments are recognized in OPEB Expense over five years.

					Balances at June 30, 2024	
	Investment Earnings Less Than Projected	Investment Earnings Greater Than Projected	Amounts Recognized in OPEB Expense through June 30, 2024	Deferred Outflows of Resources	Deferred Inflows of Resources	
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)	
2018	\$ -	\$ 20,881	\$ (20,881)	\$ -	\$ -	
2019	17,734	-	17,734	-	-	
2020	89,861	-	89,861	-	-	
2021	-	463,399	(370,720)	-	92,679	
2022	595,186	-	357,111	238,075	-	
2023	-	35,479	(14,192)	-	21,287	
2024	-	199,335	(39,867)	-	159,468	
Subtotal				\$ 238,075	\$ 273,434	
Net				\$ -	\$ 35,359	

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources will be recognized in OPEB expense as follows:

Year ended June 30

2025	\$	101,987
2026	\$	856,230
2027	\$	1,103,767
2028	\$	(132,146)
2029	\$	(584,866)
Thereafter		(833,037)
Deferred Outflows	\$	10,031,648
Deferred Inflows	\$	9,519,713

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

Exhibit 4.2 - OPEB Expense (Income)

The OPEB Expense and deferred outflows and inflows of resources primarily result from changes in the components of the net OPEB liability (NOL). Most changes in the NOL are included in the OPEB Expense in the period of the change, including service cost, interest on total OPEB liability, changes in benefit terms and projected earnings on the OPEB plan's investments. Other changes in the net OPEB liability are included in OPEB Expense over the current and future periods. These include the effects on the total OPEB liability of changes of economic and demographic assumptions and differences between expected and actual experience. In addition, the effect on the net OPEB liability of differences between the projected earnings on OPEB plan investments and actual experience with regard to those earnings are included in OPEB Expense over the current and future periods. The OPEB Expense for the reporting period ending June 30, 2024 is presented below:

Fiscal Year Ended June 30, 2024

Measurement Date	6/30/2024
1. Service cost	\$ 1,534,959
2. Interest on the total OPEB liability	
a. Total OPEB liability, beginning of year	45,281,382
b. Service cost, beginning of year	1,534,959
c. Benefit payments	(1,610,576)
d. Interest on total OPEB liability = 5.59% times (a. + b. + .5 times c.)	2,572,018
3. Differences between expected and actual experience	263,504
4. Changes of benefit terms	-
5. Changes of assumptions	(365,343)
6. Projected earnings on OPEB plan investments	
a. Plan fiduciary net position, beginning of year	3,036,428
b. Contributions - Employer	1,860,576
c. Benefit payments	(1,610,576)
d. Administrative expenses and other	-
e. Total projected earnings	(195,902)
7. Differences between projected and actual earnings on OPEB plan investments	(2,633)
8. OPEB plan administrative expenses	-
9. Other changes in fiduciary net position	-
10. Total OPEB Expense (Income)	\$ 3,806,603

SECTION 5 - SUMMARY OF PLAN PROVISIONS

Eligibility for Postemployment Benefits Employees of the Town and their dependents are eligible for postemployment medical, dental and life insurance based on the eligibility requirements under the Worcester Regional and Massachusetts Teachers Retirement Systems.

Retirement Eligibility General employees hired before April 2, 2012: retire after attaining age 55 with 10 or more years of service or any age with 20 or more years of service

General employees hired after April 1, 2012: retire after attaining age 60 with 10 or more years of service

Public Safety employees hired before April 2, 2012: retire after attaining age 55 or any age with 20 or more years of service

Public Safety employees hired after April 1, 2012: retire after attaining age 55

Ordinary Disability Eligibility Any member who is unable to perform his or her duties due to a non-occupational disability and has ten or more years of creditable service.

Accidental Disability Eligibility Any member who is unable to perform his or her duties due to a job-related disability.

Medical Premiums The total monthly premiums by plan are shown below:

Non-Medicare Plans - July 1, 2023	Individual	Family
HPHC HMO	\$915.22	\$2,379.58
HPHC Focus	\$809.70	\$2,105.21
HPHC PPO	\$1,098.27	\$2,855.50
Medicare Plans - January 1, 2024		
Aetna Advantage Plan	\$300.00	

Participant Contributions Retired employees contribute 25% of the total medical premium for the HPHC HMO, HPHC Focus, and Aetna Advantage plans, and 50% for the HPHC PPO plan.

Continuation of Coverage to Spouse After Death of Retiree Surviving spouse may continue coverage for lifetime by paying the required medical premium.

SECTION 5 - SUMMARY OF PLAN PROVISIONS

Dental Coverage

Dental coverage is provided. The total monthly costs are \$44.56 and \$132.70 for individual and family plans, respectively. Retirees contribute 50% of the monthly premiums.

Life Insurance Coverage

Retirees are eligible for a \$1,000 life insurance benefit. The total monthly cost is \$0.42. Retirees contribute \$0.21 towards the monthly premiums.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Valuation Date	July 1, 2022
Measurement Date	June 30, 2024
GASB 75 Reporting Date	June 30, 2024
Long-Term Expected Rate of Return	<p>6.5%, net of investment expenses and including inflation at 2.5%. Previously, 6%.</p> <p>A long-term assumption based on capital market expectations by asset class, historical returns and professional judgment. A building block approach was used that considered the target asset allocation, expected returns by asset class and risk analysis to determine a long-term expected average annual rate of return.</p>
Municipal Bond Rate	3.93%, based on the Bond Buyer 20-Bond GO Index published on June 30, 2024.
Discount Rate (GASB)	<p>6.48%, compounded annually, for the measurement as of June 30, 2024.</p> <p>5.59%, compounded annually, for the measurement as of June 30, 2023.</p> <p>The single rate that reflects the long-term expected rate of return on OPEB plan investments to the extent that the OPEB plan's assets, which are expected to be invested using a strategy to achieve that return, are sufficient to pay benefits, and a tax-exempt, high-quality municipal bond rate to the extent that the conditions for use of the long-term expected rate of return are not met.</p>
Discount Rate (ADEC)	5.59%, compounded annually, for development of the Actuarially Determined Contribution (ADEC) as of June 30, 2024.
Amortization Method	Level dollar amount over 30 years on an open amortization period for partial pre-funding.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Medical Trend Rates

Year	Trend
1	8.00%
2	7.50%
3	7.00%
4	6.50%
5	6.00%
Ultimate	4.10%

8% for 2022, decreasing 0.5% per year to 6%, then grading down to an ultimate trend rate of 4.1%, utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate medical inflation rate is reached in 2075.

Health care trend assumptions begin at current levels and grade down over a period of years to a lower level equal to some real rate plus inflation. The principal components of health trend are medical inflation, deductible erosion, cost shifting, utilization, technology and catastrophic claims. The overall effect of these components are expected to decline year by year.

Dental Trend Rates

Dental trend rates are 4% per year.

Medicare Trend Rates

5.5% per year.

Inflation

2.5% per year, based on current economic data, analyses from economists and other experts, and professional judgment.

Payroll Growth

3.5% per year.

Participation Rates

Medical - 80% of eligible retired employees will elect to participate.

Dental - 85% of eligible retirees will elect to participate.

Life - 70% of eligible retirees will elect to participate.

Medicare - all retired employees are assumed to enroll in Medicare at age 65.

Dependent Status

Male spouses are assumed to be three years older and female spouses are assumed to be three years younger than the retired employee.

70% of employees are assumed to retire with a covered spouse.

For current retirees, the actual census information is used.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Medical Per Capita Costs

The following annual per capita costs are for the fiscal year beginning July 1, 2022 and are applicable to retirees, survivors and spouses. Annual costs for current and future retirees are based on the blended curves shown below, developed using the plan coverages elected by current retirees and survivors and premium rates currently in effect. Future years' costs are based on the first year cost adjusted with trend.

Age	Medicare-Eligible		Medicare-Ineligible	
	Male	Female	Male	Female
Under 20	\$4,215	\$4,949	\$4,215	\$4,949
20-24	3,322	5,269	3,322	5,269
25-29	3,457	7,773	3,457	7,773
30-34	4,342	9,822	4,342	9,822
35-39	5,446	10,117	5,446	10,117
40-44	6,787	10,361	6,787	10,361
45-49	8,565	11,373	8,565	11,373
50-54	11,288	13,379	11,288	13,379
55-59	14,669	15,470	14,669	15,470
60-64	18,825	18,412	18,825	18,412
65-69	2,545	2,478	23,487	22,071
70-74	3,050	2,923	28,141	26,025
75-79	3,601	3,392	33,242	30,223
80-84	4,139	3,890	38,207	34,649
85-89	4,611	4,349	43,729	39,556
90-94	5,020	4,641	43,729	39,556
95+	5,335	4,488	43,729	39,556

Retiree Contributions

Annual per capita participant contributions for the fiscal year beginning July 1, 2022 are as follows:

Plan	Contribution
Non-Medicare	\$ 3,391
Medicare	804

Actuarial Cost Method

Entry Age Normal. The costs of each employee's postemployment benefits are allocated as a level basis over the earnings of the employee between the employee's date of hire and the assumed exit ages.

Actuarial Value of Assets

Market value of assets as of the measurement date.

Census Data

Employee and retiree data were compiled and submitted by the Town as of June 30, 2023. We made reasonable adjustments for missing or invalid data.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Use of ProVal®

KMS Actuaries has used ProVal® to develop the liabilities, normal costs and projected benefit payments in this report. We have a lease agreement with WinTech, the developer of ProVal®, and have relied on their system to perform these calculations. The actuaries signing this report and the KMS staff members who were involved in preparing it have a clear understanding of ProVal® and have used it only for its intended purpose. We have reviewed the output produced by ProVal® for reasonableness and we are not aware of any material inconsistencies, limitations or known weaknesses that would affect this report.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

General and Public Safety

Pre-Retirement Mortality

Pre-retirement mortality rates for General and Public Safety employees are based on the RP-2014 Blue Collar Employees Mortality Table, projected with generational mortality improvement using scale MP-2020.

Healthy Retiree Mortality

Healthy retiree mortality rates for General and Public Safety employees are based on the RP-2014 Blue Collar Healthy Annuitant Mortality Table, projected with generational mortality improvement using scale MP-2020.

Disabled Retiree Mortality

Disabled retiree mortality rates for General and Public Safety employees are based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2020.

Turnover Rates

Turnover rates for General and Public Safety employees are as follows:

General Employees		Public Safety	
Service	Rate	Service	Rate
0	15.00%	0	1.50%
1	12.00%	1	1.50%
2	10.00%	2	1.50%
3	9.00%	3	1.50%
4	8.00%	4	1.50%
5	7.60%	5	1.50%
10	5.40%	10	1.50%
15	3.30%	15	0.00%
20	2.00%	20	0.00%
25	1.00%	25	0.00%
30	0.00%	30	0.00%

Disability Rates

Disability rates for General and Public Safety employees are as follows:

General Employees		Public Safety	
Age	Rate	Age	Rate
25	0.02%	25	0.20%
30	0.03%	30	0.30%
35	0.06%	35	0.30%
40	0.10%	40	0.30%
45	0.15%	45	1.00%
50	0.19%	50	1.25%
55	0.24%	55	1.20%
60	0.28%	60	0.85%

55% of the General employee disabilities are job-related.

90% of the Public Safety employee disabilities are job-related.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

General and Public Safety

Retirement Rates

Retirement rates for General and Public Safety employees are as follows:

General Employees			Public Safety	
Age	Male	Female	Age	All
45	0.00%	0.00%	45	1.00%
50	1.00%	1.50%	50	2.00%
55	2.00%	5.50%	55	15.00%
60	12.00%	5.00%	60	20.00%
62	30.00%	15.00%	62	25.00%
65	40.00%	15.00%	65	100.00%
69	30.00%	20.00%		
70	100.00%	100.00%		

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Teachers

Pre-Retirement Mortality

Pre-retirement mortality rates for Teachers are based on the PUB-2010 Teachers Headcount-Weighted Employee Mortality Table, base year 2010, projected with generational mortality improvement using Scale MP-2021.

Healthy Retiree Mortality

Healthy retiree mortality rates for Teachers are based on the PUB-2010 Teachers Headcount-Weighted Retiree Mortality Table, base year 2010, projected with generational mortality improvement using Scale MP-2021.

Disabled Retiree Mortality

Disabled retiree mortality rates for Teachers are based on the PUB-2010 Teachers Headcount-Weighted Retiree Mortality Table, base year 2010, projected with generational mortality improvement using Scale MP-2021.

Turnover Rates

Turnover rates for Teachers are as follows:

Service						
0			5		10+	
Age	Male	Female	Male	Female	Male	Female
20	13.0%	10.0%	5.5%	7.0%	1.5%	5.0%
30	15.0%	15.0%	5.4%	8.8%	1.5%	4.5%
40	13.3%	10.5%	5.2%	5.0%	1.7%	2.2%
50	16.2%	9.8%	7.0%	5.0%	2.3%	2.0%

Disability Rates

Disability rates for Teachers are as follows:

Age	Rate
20	0.004%
30	0.006%
40	0.010%
50	0.050%
60	0.070%

35% of the disabilities are job-related.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Teachers

Retirement Rates

Retirement rates for Teachers are as follows:

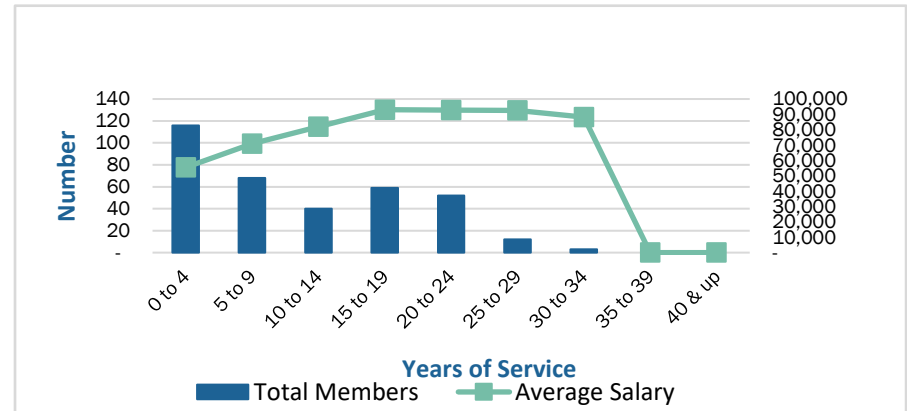
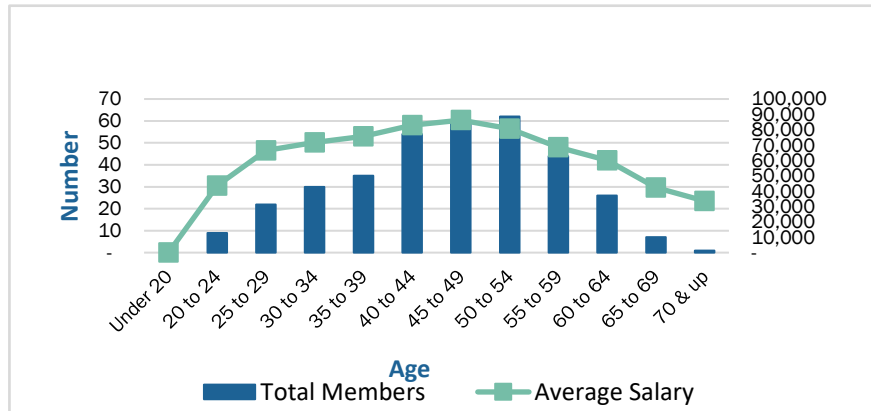
Age	Years of Service					
	Less than 20		20-29		30+	
	Male	Female	Male	Female	Male	Female
50	0.0%	0.0%	1.0%	1.0%	2.0%	1.5%
51	0.0%	0.0%	1.0%	1.0%	2.0%	1.5%
52	0.0%	0.0%	1.0%	1.0%	2.0%	1.5%
53	0.0%	0.0%	1.5%	1.0%	2.0%	1.5%
54	0.0%	0.0%	2.5%	1.0%	2.0%	2.0%
55	5.0%	3.0%	3.0%	3.0%	6.0%	5.0%
56	5.0%	3.0%	6.0%	5.0%	20.0%	15.0%
57	5.0%	4.0%	10.0%	8.0%	40.0%	35.0%
58	5.0%	8.0%	15.0%	10.0%	50.0%	35.0%
59	10.0%	8.0%	20.0%	15.0%	50.0%	35.0%
60	10.0%	10.0%	25.0%	20.0%	40.0%	35.0%
61	20.0%	12.0%	30.0%	25.0%	40.0%	35.0%
62	20.0%	12.0%	35.0%	30.0%	35.0%	35.0%
63	25.0%	15.0%	40.0%	30.0%	35.0%	35.0%
64	25.0%	20.0%	40.0%	30.0%	35.0%	35.0%
65	25.0%	25.0%	40.0%	40.0%	35.0%	35.0%
66	30.0%	25.0%	30.0%	30.0%	40.0%	35.0%
67	30.0%	30.0%	30.0%	30.0%	40.0%	30.0%
68	30.0%	30.0%	30.0%	30.0%	40.0%	30.0%
69	30.0%	30.0%	30.0%	30.0%	40.0%	30.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SECTION 7 - PLAN MEMBER INFORMATION

Exhibit 7.1 - Active Members by Age and Years of Service as of July 1, 2022

Age	Years of Service									Total	Total Salary	Average Salary
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up			
Under 20	-	-	-	-	-	-	-	-	-	-	-	-
20 to 24	9	-	-	-	-	-	-	-	-	9	392,194	43,577
25 to 29	16	6	-	-	-	-	-	-	-	22	1,462,426	66,474
30 to 34	16	12	2	-	-	-	-	-	-	30	2,154,694	71,823
35 to 39	16	9	8	2	-	-	-	-	-	35	2,649,910	75,712
40 to 44	19	8	4	18	5	-	-	-	-	54	4,483,109	83,021
45 to 49	11	8	4	20	15	2	-	-	-	60	5,174,819	86,247
50 to 54	15	11	8	9	16	3	-	-	-	62	5,004,462	80,717
55 to 59	10	8	8	3	9	3	3	-	-	44	3,017,328	68,576
60 to 64	3	5	5	6	6	1	-	-	-	26	1,563,485	60,134
65 to 69	1	1	1	1	-	3	-	-	-	7	296,816	42,402
70 & up	-	-	-	-	1	-	-	-	-	1	33,612	33,612
Total	116	68	40	59	52	12	3	-	-	350	26,232,855	74,951
Total Salary	6,445,008	4,823,609	3,275,069	5,490,557	4,822,604	1,111,338	264,670	-	-			
Average Salary	55,560	70,935	81,877	93,060	92,742	92,611	88,223	-	-			

Average Age: 46.3 Average Service: 11.0



SECTION 7 - PLAN MEMBER INFORMATION

Exhibit 7.2 - Retired Members, Covered Spouses and Survivors as of July 1, 2022

Non-Medicare Plans				Medicare Plans	
Age	HPHC HMO	HPHC Focus	HPHC PPO	Aetna Advantage Plan	Total
Under 40	0	0	0	0	0
40 to 44	0	0	0	0	0
45 to 49	1	0	0	0	1
50 to 54	1	0	0	0	1
55 to 59	7	0	1	0	8
60 to 64	16	1	3	1	21
65 to 69	1	0	0	31	32
70 to 74	0	0	0	30	30
75 to 79	0	0	0	25	25
80 to 84	1	0	0	21	22
85 to 89	0	0	1	11	12
90+	0	0	0	3	3
Total	27	1	5	122	155
Covered Spouses	19	0	1	66	86

Average Age: 72.8

In addition, there are 68 retirees, survivors and covered spouses that are not covered under any medical plan but are covered under a dental and/or life insurance plan which the Town contributes to.

SECTION 8 - GLOSSARY OF TERMS

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting OPEB costs, such as mortality, withdrawal, disability and retirement; changes in compensation and OPEB benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

Actuarial Cost Method (or Funding Method) – A procedure for allocating the Actuarial Present Value of projected benefit payments to the current year (Service Cost) and the past (Total OPEB Liability).

Actuarial Gain or Loss (or Experience Gain or Loss) – A measure of the difference between actual experience and that expected based upon the set of Actuarial Assumptions during the period between the valuation date and the most recent immediately preceding valuation date.

Actuarial Present Value of Projected Benefit Payments – The dollar value on the valuation date of all benefits expected to be paid to current members based upon the Actuarial Assumptions and the terms of the Plan.

Actuarially Determined Contribution – A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

Actuarial Valuation Date – The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

Deferred Inflow of Resources – Acquisition of resources by a governmental entity that is applicable to future reporting periods. Under GASB 75, deferred inflows of resources are made up of experience gains, assumption changes reducing the Total OPEB Liability and investment gains that are recognized in future reporting periods.

Deferred Outflow of Resources – Consumption of resources by a governmental entity that is applicable to future reporting periods. Under GASB 75, deferred outflows of resources are made up of experience losses, assumption changes increasing the Total OPEB Liability and investment losses that are recognized in future reporting periods.

Discount Rate – Single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the sum of:

- (1) a long-term expected rate of return on OPEB plan investments *to the extent that the OPEB plan's assets are sufficient to pay benefits and OPEB plan assets are expected to be invested using a strategy to achieve that return* and
- (2) a tax-exempt, high-quality municipal bond rate *to the extent that the conditions for use of the long-term expected rate of return are not met.*

Employer Future Period Contributions – Contributions made by the employer, generally to an outside trust fund, to pay for future OPEB costs. These are costs in addition to the employer contributions made during the year to pay for ongoing premiums.

SECTION 8 - GLOSSARY OF TERMS

Entry Age Normal Actuarial Cost Method – A method under which the actuarial present value of the projected benefits of each individual in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age.

Explicit Subsidy – The difference between (a) the blended rates based on combined active and retired member experience and (b) actual cash contributions made by the employer.

Fiduciary Net Position – The fair market value of assets as of the measurement date.

Funded Ratio – The Actuarial Value of Assets expressed as a percentage of the Actuarial Accrued Liability.

GASB – Governmental Accounting Standards Board.

Health Cost Trend Rate – The rate of change in per capita health claims cost over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

Implicit Subsidy – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group and (b) the blended rates based on combined active and retired member experience.

Long-Term Expected Rate of Return – Long-term expected rate of return on OPEB plan investments expected to be used to finance the payment of benefits, net of investment expenses.

Measurement Date – The date as of which the Total OPEB Liability and Fiduciary Net Position are measured.

Municipal Bond Rate – Yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Net OPEB Liability – The liability of the employer for benefits provided through an OPEB plan. It is calculated as the Total OPEB Liability less the Fiduciary Net Position.

OPEB – Other Postemployment Benefits including medical, dental, vision, hearing and life insurance benefits.

Pay-As-You-Go – A method of financing an OPEB plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Present Value of Future Benefits – The actuarial present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Reporting Date – The last day of the Plan or employer's fiscal year.

SECTION 8 - GLOSSARY OF TERMS

Service Cost – The portion of the actuarial present value of projected benefit amounts that is attributed to a valuation year.

Substantive Plan – The terms of an OPEB plan as understood by the employer and plan members.

Total OPEB Liability – The portion of the actuarial present value of projected benefit amounts that is attributed to past periods of employee service.

Unfunded Actuarial Accrued Liability – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

SECTION 9 - BREAKOUT OF RESULTS BY DEPARTMENT

Department	Town	School	Police	Fire	Water	60% Town - 40% Water	40% Town - 60% Water	Total
Summary of Member Data Used in Valuation								
Active Members	57	246	19	22	3	2	1	350
Average Age	48.1	47.0	36.3	42.0	43.2	55.9	64.3	46.3
Average Service	9.0	11.3	10.6	11.3	11.6	14.2	25.5	11.0
Covered Payroll	4,167,498	17,260,608	2,206,775	2,211,782	177,609	142,405	66,178	26,232,855
Retired Members and Survivors	50	130	7	3	2	1	0	193
Average Age	73.5	73.0	70.0	62.9	72.0	70.1	-	72.8
Covered Spouses	26	81	5	3	1	0	0	116
Expected Benefit Payments	421,144	1,028,924	66,820	81,477	7,731	3,555	925	1,610,576
OPEB Trust contributions	38,727	176,090	16,543	16,707	0	1,486	447	250,000
Total Employer Contributions	459,871	1,205,014	83,363	98,184	7,731	5,041	1,372	1,860,576
Beginning Net OPEB Liability - June 30, 2023								
Total OPEB Liability	7,044,034	31,669,204	2,907,508	2,889,588	433,932	258,979	78,137	45,281,382
Fiduciary Net Position	506,389	2,072,677	227,708	227,637	0	1,549	468	3,036,428
Net OPEB Liability	6,537,645	29,596,527	2,679,800	2,661,951	433,932	257,430	77,669	42,244,954
Total OPEB Liability, beginning of year	7,044,034	31,669,204	2,907,508	2,889,588	433,932	258,979	78,137	45,281,382
Service cost	205,834	973,317	141,273	195,764	8,788	7,647	2,336	1,534,959
Interest	393,497	1,795,957	168,559	170,194	24,532	14,806	4,473	2,572,018
Changes of benefit terms	0	0	0	0	0	0	0	0
Differences between expected and actual experience	0	0	0	0	0	0	0	0
Changes of assumptions	(708,434)	(3,869,874)	(377,028)	(372,073)	(51,456)	(28,103)	(8,992)	(5,415,960)
Benefit payments	(421,144)	(1,028,924)	(66,820)	(81,477)	(7,731)	(3,555)	(925)	(1,610,576)
Net change in total OPEB liability	(530,247)	(2,129,524)	(134,016)	(87,592)	(25,867)	(9,205)	(3,108)	(2,919,559)
Total OPEB Liability, end of year	6,513,787	29,539,680	2,773,492	2,801,996	408,065	249,774	75,029	42,361,823
Ending Net OPEB Liability - June 30, 2024								
Total OPEB Liability	6,513,787	29,539,680	2,773,492	2,801,996	408,065	249,774	75,029	42,361,823
Fiduciary Net Position	610,703	2,519,157	273,647	273,750	0	3,387	1,021	3,681,665
Net OPEB Liability	5,903,084	27,020,523	2,499,845	2,528,246	408,065	246,387	74,008	38,680,158

SECTION 9 - BREAKOUT OF RESULTS BY DEPARTMENT

Department	Town	School	Police	Fire	Water	60% Town - 40% Water	40% Town - 60% Water	Total
Total Deferred Outflows of Resources								
Differences between Expected and Actual Experience	473,787	2,130,095	195,561	194,356	29,187	17,419	5,256	3,045,661
Changes in Assumptions	1,086,750	4,885,908	448,569	445,804	66,947	39,955	12,055	6,985,987
Differences between Expected and Actual Earnings on OPEB Plan Investments	0	0	0	0	0	0	0	0
Total Deferred Outflows of Resources	1,560,537	7,016,003	644,130	640,160	96,133	57,374	17,310	10,031,648
Total Deferred Inflows of Resources								
Differences between Expected and Actual Experience	375,697	1,689,093	155,073	154,118	23,144	13,813	4,167	2,415,105
Changes in Assumptions	1,099,702	4,944,140	453,915	451,117	67,745	40,431	12,199	7,069,249
Differences between Expected and Actual Earnings on OPEB Plan Investments	5,897	24,136	2,652	2,651	0	18	5	35,359
Total Deferred Inflows of Resources	1,481,296	6,657,369	611,640	607,886	90,889	54,262	16,372	9,519,713
Total OPEB Expense	881,788	2,214,781	278,875	363,567	53,371	5,777	8,444	3,806,603
Sensitivity of the Net OPEB Liability to Changes in the Discount Rate								
Current Discount Rate: 6.48%	5,903,084	27,020,523	2,499,845	2,528,246	408,065	246,387	74,008	38,680,158
1% Decrease in the Discount Rate: 5.48%	6,850,035	31,314,894	2,903,045	2,935,590	467,388	282,698	84,915	44,838,566
1% Increase in the Discount Rate: 7.48%	5,130,260	23,515,806	2,170,786	2,195,805	359,650	216,753	65,106	33,654,166
Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates								
Current Trend Rates	5,903,084	27,020,523	2,499,845	2,528,246	408,065	246,387	74,008	38,680,158
1% Decrease in Trend Rates	4,946,236	22,681,266	2,092,430	2,116,644	348,122	209,696	62,987	32,457,381
1% Increase in Trend Rates	7,108,388	32,486,515	3,013,049	3,046,724	483,573	292,605	87,891	46,518,746
Deferred Outflows of Resources and Deferred Inflows of Resources recognized in OPEB Expense								
2025	15,786	71,446	6,473	6,430	1,045	620	187	101,987
2026	132,533	599,829	54,341	53,980	8,772	5,205	1,570	856,230
2027	170,849	773,240	70,051	69,585	11,308	6,710	2,024	1,103,767
2028	(20,454)	(92,575)	(8,387)	(8,331)	(1,354)	(803)	(242)	(132,146)
2029	(90,530)	(409,725)	(37,119)	(36,872)	(5,992)	(3,555)	(1,073)	(584,866)
Thereafter	(128,943)	(583,581)	(52,869)	(52,518)	(8,534)	(5,064)	(1,528)	(833,037)

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Under GASB 74 and GASB 75, a series of projections and calculations are used to determine the discount rate for the purpose of the measurement of the Total OPEB Liability. The discount rate is the single rate that reflects (1) the long-term expected rate of return on OPEB plan investments that are expected to be used to finance the payment of benefits, to the extent that the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments and OPEB plan assets are expected to be invested using a strategy to achieve that return, and (2) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher, to the extent that the conditions for use of the long-term expected rate of return are not met.

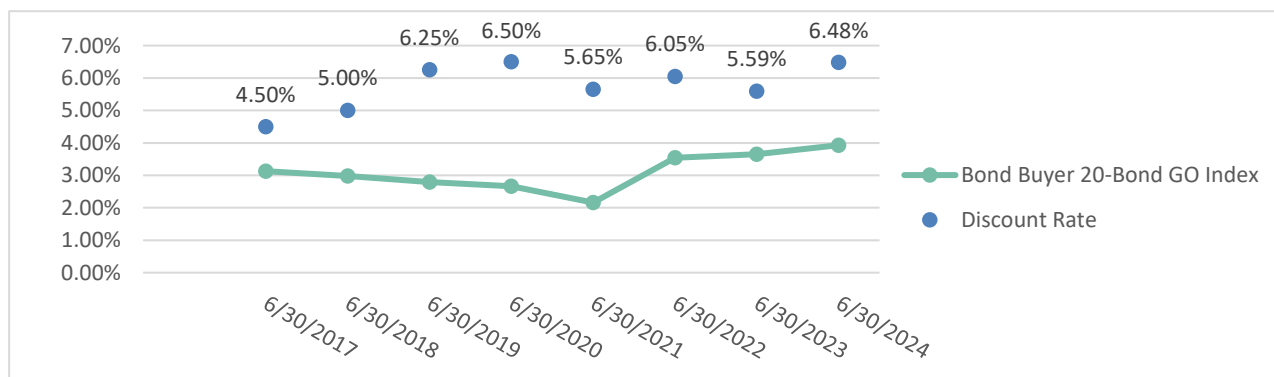
Projected cash flows into and out of the OPEB plan are assumed to be contributions to the OPEB plan, benefit payments, OPEB plan administrative expenses and OPEB plan investment earnings. These projected cash flows are used to project the OPEB plan's fiduciary net position at the beginning of each period. The OPEB plan's projected fiduciary net position at the beginning of each period is compared to the amount of benefit payments projected to occur in that period.

It is assumed that the OPEB plan's fiduciary net position is expected to always be invested using a strategy to achieve the long-term expected rate of return on OPEB plan investments.

The benefit payments that are projected to occur in a period are discounted using the long-term expected rate of return on OPEB plan investments if the amount of the OPEB plan's beginning fiduciary net position is projected to be sufficient to make the benefit payments in that period. In periods in which benefit payments are projected to be greater than the amount of the OPEB plan's fiduciary net position, they are discounted using a municipal bond rate as required by GASB 74.

For purposes of this valuation, liabilities are based on a discount rate of 6.48%, a long-term investment return rate of 6.5% and a municipal bond rate of 3.93%, based on the Bond Buyer 20-Bond GO Index published on June 30, 2024. The OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to 98 years of projected future benefit payments that are expected to be fully funded and the 3.93% municipal bond rate was applied to the unfunded portion of projected future benefit payments in all other years to determine the total OPEB liability. Projected benefit payments are discounted to their actuarial present value using a single discount rate of 6.48%.

Below are the historical Bond Buyer 20-Bond GO Indices and the Town's discount rate used in disclosures since the implementation of GASB 74 and GASB 75¹:



¹Bond rates prior to 2021 are based on the S&P Municipal Bond 20 Year High Grade Index.

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 1: Projection of Contributions

Year	Projected Payroll			Projected Contributions			
	Payroll for Current Plan Members (a)	Payroll for Future Plan Members (b)	Total Payroll (c) = (a) + (b)	Employer Contributions (Benefit Payments) (d)	Employer Contributions (OPEB Trust) (e)	Employer Contributions Related to Payroll of Future Employees (f) = (b) * 4.79%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2024	25,740,790	-	25,740,790	1,610,576	250,000	-	1,860,576
2025	24,985,690	1,656,028	26,641,718	1,697,606	250,000	79,308	1,868,298
2026	24,287,378	3,286,800	27,574,178	1,774,644	250,000	157,407	1,867,237
2027	23,565,233	4,974,041	28,539,274	1,847,626	250,000	238,210	1,859,416
2028	22,879,194	6,658,955	29,538,149	1,995,641	250,000	318,901	1,926,740
2029	22,073,275	8,498,709	30,571,984	2,172,363	250,000	407,008	2,015,355
2030	21,140,565	10,501,438	31,642,003	2,334,628	250,000	502,920	2,081,708
2031	20,162,655	12,586,818	32,749,473	2,544,280	250,000	602,790	2,191,490
2032	19,127,266	14,768,439	33,895,705	2,847,221	250,000	707,269	2,389,952
2033	17,985,711	17,096,344	35,082,055	3,121,188	250,000	818,754	2,552,434
2034	16,800,265	19,509,662	36,309,927	3,418,271	250,000	934,329	2,733,942
2035	15,595,283	21,985,491	37,580,774	3,744,131	250,000	1,052,898	2,941,233
2036	14,150,901	24,745,200	38,896,101	3,899,541	250,000	1,185,062	2,964,479
2037	12,773,264	27,484,201	40,257,465	4,054,557	7,253,580	1,316,234	9,991,903
2038	11,541,293	30,125,183	41,666,476	4,302,892	7,253,580	1,442,712	10,113,760
2039	10,559,293	32,565,510	43,124,803	4,351,263	7,253,580	1,559,581	10,045,262
2040	9,622,943	35,011,228	44,634,171	4,334,042	7,253,580	1,676,708	9,910,914
2041	8,824,596	37,371,771	46,196,367	4,447,796	7,253,580	1,789,755	9,911,621
2042	8,077,779	39,735,461	47,813,240	4,526,295	7,253,580	1,902,954	9,876,921
2043	7,494,936	41,991,767	49,486,703	4,318,434	7,253,580	2,011,009	9,561,005
2044	6,946,833	44,271,905	51,218,738	4,245,990	7,253,580	2,120,207	9,379,363
2045	6,431,204	46,580,190	53,011,394	4,289,067	7,253,580	2,230,752	9,311,895
2046	5,952,290	48,914,503	54,866,793	4,231,454	7,253,580	2,342,543	9,142,491
2047	5,459,069	51,328,062	56,787,131	4,221,420	7,253,580	2,458,130	9,016,870
2048	5,069,852	53,704,829	58,774,681	4,349,737	7,253,580	2,571,955	9,031,362
2049	4,623,532	56,208,263	60,831,795	4,461,344	-	2,691,846	1,769,498
2050	4,177,191	58,783,717	62,960,908	4,505,397	-	2,815,185	1,690,212
2051	3,744,777	61,419,763	65,164,540	4,682,475	-	2,941,427	1,741,048
2052	3,337,313	64,107,986	67,445,299	4,757,533	-	3,070,168	1,687,365
2053	2,903,352	66,902,532	69,805,884	4,830,031	-	3,204,000	1,626,031
2054	2,508,706	69,740,384	72,249,090	4,973,394	-	3,339,906	1,633,488
2055	2,143,740	72,634,068	74,777,808	4,996,265	-	3,478,487	1,517,778
2056	1,726,616	75,668,415	77,395,031	5,067,856	-	3,623,803	1,444,053
2057	1,445,151	78,658,706	80,103,857	5,024,949	-	3,767,010	1,257,939

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 1: Projection of Contributions

Year	Projected Payroll			Projected Contributions			
	Payroll for Current Plan Members (a)	Payroll for Future Plan Members (b)	Total Payroll (c) = (a) + (b)	Employer Contributions (Benefit Payments) (d)	Employer Contributions (OPEB Trust) (e)	Employer Contributions Related to Payroll of Future Employees (f) = (b) * 4.79%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2058	1,148,099	81,759,393	82,907,492	4,995,698	-	3,915,504	1,080,194
2059	887,382	84,921,872	85,809,254	4,912,566	-	4,066,957	845,609
2060	685,256	88,127,322	88,812,578	4,724,222	-	4,220,467	503,755
2061	517,297	91,403,721	91,921,018	4,769,493	-	4,377,376	392,117
2062	398,685	94,739,569	95,138,254	4,700,974	-	4,537,132	163,842
2063	304,174	98,163,919	98,468,093	4,544,119	-	4,701,126	-
2064	219,786	101,694,690	101,914,476	4,472,700	-	4,870,216	-
2065	133,915	105,347,568	105,481,483	4,437,036	-	5,045,155	-
2066	100,033	109,073,302	109,173,335	4,242,091	-	5,223,582	-
2067	65,699	112,928,703	112,994,402	4,125,655	-	5,408,219	-
2068	48,289	116,900,917	116,949,206	4,053,735	-	5,598,451	-
2069	30,874	121,011,554	121,042,428	3,904,016	-	5,795,312	-
2070	15,267	125,263,646	125,278,913	3,802,519	-	5,998,947	-
2071	3,749	129,659,926	129,663,675	3,674,539	-	6,209,487	-
2072	-	134,201,904	134,201,904	3,539,000	-	6,427,005	-
2073	-	138,898,971	138,898,971	3,399,769	-	6,651,950	-
2074	-	143,760,435	143,760,435	3,251,428	-	6,884,769	-
2075	-	148,792,050	148,792,050	3,111,934	-	7,125,735	-
2076	-	153,999,772	153,999,772	2,947,237	-	7,375,136	-
2077	-	159,389,764	159,389,764	2,791,708	-	7,633,266	-
2078	-	164,968,406	164,968,406	2,640,928	-	7,900,430	-
2079	-	170,742,300	170,742,300	2,490,828	-	8,176,945	-
2080	-	176,718,281	176,718,281	2,348,754	-	8,463,138	-
2081	-	182,903,421	182,903,421	2,200,176	-	8,759,348	-
2082	-	189,305,041	189,305,041	2,056,064	-	9,065,926	-
2083	-	195,930,717	195,930,717	1,914,678	-	9,383,233	-
2084	-	202,788,292	202,788,292	1,775,779	-	9,711,646	-
2085	-	209,885,882	209,885,882	1,638,054	-	10,051,554	-
2086	-	217,231,888	217,231,888	1,501,554	-	10,403,358	-
2087	-	224,835,004	224,835,004	1,368,362	-	10,767,476	-
2088	-	232,704,229	232,704,229	1,235,531	-	11,144,337	-
2089	-	240,848,877	240,848,877	1,109,084	-	11,534,389	-
2090	-	249,278,588	249,278,588	982,408	-	11,938,093	-
2091	-	258,003,339	258,003,339	867,659	-	12,355,926	-

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 1: Projection of Contributions

Year	Projected Payroll			Projected Contributions			
	Payroll for Current Plan Members (a)	Payroll for Future Plan Members (b)	Total Payroll (c) = (a) + (b)	Employer Contributions (Benefit Payments) (d)	Employer Contributions (OPEB Trust) (e)	Employer Contributions Related to Payroll of Future Employees (f) = (b) * 4.79%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2092	-	267,033,456	267,033,456	754,836	-	12,788,383	-
2093	-	276,379,627	276,379,627	649,476	-	13,235,977	-
2094	-	286,052,914	286,052,914	555,446	-	13,699,236	-
2095	-	296,064,766	296,064,766	467,444	-	14,178,709	-
2096	-	306,427,033	306,427,033	389,302	-	14,674,964	-
2097	-	317,151,979	317,151,979	319,507	-	15,188,588	-
2098	-	328,252,298	328,252,298	259,387	-	15,720,188	-
2099	-	339,741,128	339,741,128	207,008	-	16,270,395	-
2100	-	351,632,067	351,632,067	163,382	-	16,839,859	-
2101	-	363,939,189	363,939,189	127,040	-	17,429,254	-
2102	-	376,677,061	376,677,061	97,241	-	18,039,278	-
2103	-	389,860,758	389,860,758	73,200	-	18,670,652	-
2104	-	403,505,885	403,505,885	54,139	-	19,324,125	-
2105	-	417,628,591	417,628,591	39,304	-	20,000,470	-
2106	-	432,245,592	432,245,592	27,980	-	20,700,486	-
2107	-	447,374,188	447,374,188	19,513	-	21,425,003	-
2108	-	463,032,285	463,032,285	13,316	-	22,174,878	-
2109	-	479,238,415	479,238,415	8,880	-	22,950,999	-
2110	-	496,011,760	496,011,760	5,783	-	23,754,284	-
2111	-	513,372,172	513,372,172	3,673	-	24,585,684	-
2112	-	531,340,198	531,340,198	2,273	-	25,446,183	-
2113	-	549,937,105	549,937,105	1,369	-	26,336,799	-
2114	-	569,184,904	569,184,904	803	-	27,258,587	-
2115	-	589,106,376	589,106,376	457	-	28,212,638	-
2116	-	609,725,099	609,725,099	253	-	29,200,080	-
2117	-	631,065,477	631,065,477	137	-	30,222,083	-
2118	-	653,152,769	653,152,769	72	-	31,279,856	-
2119	-	676,013,116	676,013,116	36	-	32,374,651	-
2120	-	699,673,575	699,673,575	18	-	33,507,763	-
2121	-	724,162,150	724,162,150	9	-	34,680,535	-
2122	-	749,507,825	749,507,825	4	-	35,894,354	-
2123	-	775,740,599	775,740,599	2	-	37,150,656	-
2124	-	802,891,520	802,891,520	1	-	38,450,929	-
2125	-	830,992,723	830,992,723	-	-	39,796,712	-

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 2: Projection of the OPEB Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Employer Contributions for Current Plan Members (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2024	3,036,428	1,860,576	1,610,576	-	395,237	3,681,665
2025	3,681,665	1,868,298	1,697,606	-	244,856	4,097,213
2026	4,097,213	1,867,237	1,774,644	-	269,328	4,459,134
2027	4,459,134	1,859,416	1,847,626	-	290,227	4,761,151
2028	4,761,151	1,926,740	1,995,641	-	307,236	4,999,486
2029	4,999,486	2,015,355	2,172,363	-	319,864	5,162,342
2030	5,162,342	2,081,708	2,334,628	-	327,332	5,236,754
2031	5,236,754	2,191,490	2,544,280	-	328,923	5,212,887
2032	5,212,887	2,389,952	2,847,221	-	323,976	5,079,594
2033	5,079,594	2,552,434	3,121,188	-	311,689	4,822,529
2034	4,822,529	2,733,942	3,418,271	-	291,224	4,429,424
2035	4,429,424	2,941,233	3,744,131	-	261,818	3,888,344
2036	3,888,344	2,964,479	3,899,541	-	222,353	3,175,635
2037	3,175,635	9,991,903	4,054,557	-	399,380	9,512,361
2038	9,512,361	10,113,760	4,302,892	-	807,157	16,130,385
2039	16,130,385	10,045,262	4,351,263	-	1,233,530	23,057,914
2040	23,057,914	9,910,914	4,334,042	-	1,680,013	30,314,798
2041	30,314,798	9,911,621	4,447,796	-	2,148,036	37,926,659
2042	37,926,659	9,876,921	4,526,295	-	2,639,128	45,916,413
2043	45,916,413	9,561,005	4,318,434	-	3,154,950	54,313,933
2044	54,313,933	9,379,363	4,245,990	-	3,697,240	63,144,546
2045	63,144,546	9,311,895	4,289,067	-	4,267,637	72,435,010
2046	72,435,010	9,142,491	4,231,454	-	4,867,884	82,213,931
2047	82,213,931	9,016,870	4,221,420	-	5,499,758	92,509,139
2048	92,509,139	9,031,362	4,349,737	-	6,165,247	103,356,010
2049	103,356,010	1,769,498	4,461,344	-	6,630,656	107,294,820
2050	107,294,820	1,690,212	4,505,397	-	6,882,670	111,362,305
2051	111,362,305	1,741,048	4,682,475	-	7,142,953	115,563,831
2052	115,563,831	1,687,365	4,757,533	-	7,411,869	119,905,532
2053	119,905,532	1,626,031	4,830,031	-	7,689,730	124,391,262
2054	124,391,262	1,633,488	4,973,394	-	7,976,885	129,028,241
2055	129,028,241	1,517,778	4,996,265	-	8,273,785	133,823,539
2056	133,823,539	1,444,053	5,067,856	-	8,580,756	138,780,492
2057	138,780,492	1,257,939	5,024,949	-	8,898,304	143,911,786
2058	143,911,786	1,080,194	4,995,698	-	9,227,012	149,223,294
2059	149,223,294	845,609	4,912,566	-	9,567,338	154,723,675

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 2: Projection of the OPEB Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Employer Contributions for Current Plan Members (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2060	154,723,675	503,755	4,724,222	-	9,919,874	160,423,082
2061	160,423,082	392,117	4,769,493	-	10,285,236	166,330,942
2062	166,330,942	163,842	4,700,974	-	10,664,054	172,457,864
2063	172,457,864	-	4,544,119	-	11,062,077	178,975,822
2064	178,975,822	-	4,472,700	-	11,488,066	185,991,188
2065	185,991,188	-	4,437,036	-	11,945,224	193,499,376
2066	193,499,376	-	4,242,091	-	12,439,591	201,696,876
2067	201,696,876	-	4,125,655	-	12,976,213	210,547,434
2068	210,547,434	-	4,053,735	-	13,553,837	220,047,536
2069	220,047,536	-	3,904,016	-	14,176,209	230,319,729
2070	230,319,729	-	3,802,519	-	14,847,201	241,364,411
2071	241,364,411	-	3,674,539	-	15,569,264	253,259,136
2072	253,259,136	-	3,539,000	-	16,346,826	266,066,962
2073	266,066,962	-	3,399,769	-	17,183,860	279,851,053
2074	279,851,053	-	3,251,428	-	18,084,647	294,684,272
2075	294,684,272	-	3,111,934	-	19,053,340	310,625,678
2076	310,625,678	-	2,947,237	-	20,094,884	327,773,325
2077	327,773,325	-	2,791,708	-	21,214,536	346,196,153
2078	346,196,153	-	2,640,928	-	22,416,920	365,972,145
2079	365,972,145	-	2,490,828	-	23,707,238	387,188,555
2080	387,188,555	-	2,348,754	-	25,090,922	409,930,723
2081	409,930,723	-	2,200,176	-	26,573,991	434,304,538
2082	434,304,538	-	2,056,064	-	28,162,973	460,411,447
2083	460,411,447	-	1,914,678	-	29,864,517	488,361,286
2084	488,361,286	-	1,775,779	-	31,685,771	518,271,278
2085	518,271,278	-	1,638,054	-	33,634,396	550,267,620
2086	550,267,620	-	1,501,554	-	35,718,595	584,484,661
2087	584,484,661	-	1,368,362	-	37,947,031	621,063,330
2088	621,063,330	-	1,235,531	-	40,328,962	660,156,761
2089	660,156,761	-	1,109,084	-	42,874,144	701,921,821
2090	701,921,821	-	982,408	-	45,592,990	746,532,403
2091	746,532,403	-	867,659	-	48,496,407	794,161,151
2092	794,161,151	-	754,836	-	51,595,943	845,002,258
2093	845,002,258	-	649,476	-	54,904,039	899,256,821
2094	899,256,821	-	555,446	-	58,433,641	957,135,016
2095	957,135,016	-	467,444	-	62,198,584	1,018,866,156

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 2: Projection of the OPEB Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Employer Contributions for Current Plan Members (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2096	1,018,866,156	-	389,302	-	66,213,648	1,084,690,502
2097	1,084,690,502	-	319,507	-	70,494,499	1,154,865,494
2098	1,154,865,494	-	259,387	-	75,057,827	1,229,663,934
2099	1,229,663,934	-	207,008	-	79,921,428	1,309,378,354
2100	1,309,378,354	-	163,382	-	85,104,283	1,394,319,255
2101	1,394,319,255	-	127,040	-	90,626,623	1,484,818,838
2102	1,484,818,838	-	97,241	-	96,510,064	1,581,231,661
2103	1,581,231,661	-	73,200	-	102,777,679	1,683,936,140
2104	1,683,936,140	-	54,139	-	109,454,090	1,793,336,091
2105	1,793,336,091	-	39,304	-	116,565,569	1,909,862,356
2106	1,909,862,356	-	27,980	-	124,140,144	2,033,974,520
2107	2,033,974,520	-	19,513	-	132,207,710	2,166,162,717
2108	2,166,162,717	-	13,316	-	140,800,144	2,306,949,545
2109	2,306,949,545	-	8,880	-	149,951,432	2,456,892,097
2110	2,456,892,097	-	5,783	-	159,697,798	2,616,584,112
2111	2,616,584,112	-	3,673	-	170,077,848	2,786,658,287
2112	2,786,658,287	-	2,273	-	181,132,715	2,967,788,729
2113	2,967,788,729	-	1,369	-	192,906,223	3,160,693,583
2114	3,160,693,583	-	803	-	205,445,057	3,366,137,837
2115	3,366,137,837	-	457	-	218,798,945	3,584,936,325
2116	3,584,936,325	-	253	-	233,020,853	3,817,956,925
2117	3,817,956,925	-	137	-	248,167,196	4,066,123,984
2118	4,066,123,984	-	72	-	264,298,057	4,330,421,969
2119	4,330,421,969	-	36	-	281,477,427	4,611,899,360
2120	4,611,899,360	-	18	-	299,773,458	4,911,672,800
2121	4,911,672,800	-	9	-	319,258,732	5,230,931,523
2122	5,230,931,523	-	4	-	340,010,549	5,570,942,068
2123	5,570,942,068	-	2	-	362,111,234	5,933,053,300
2124	5,933,053,300	-	1	-	385,648,464	6,318,701,763
2125	6,318,701,763	-	-	-	410,715,615	6,729,417,378

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 3: Actuarial Present Value of Projected Benefit Payments

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g) = 6.48%
2025	3,681,665	1,697,606	1,697,606	-	1,644,986	-	1,645,116
2026	4,097,213	1,774,644	1,774,644	-	1,614,681	-	1,615,066
2027	4,459,134	1,847,626	1,847,626	-	1,578,483	-	1,579,110
2028	4,761,151	1,995,641	1,995,641	-	1,600,880	-	1,601,770
2029	4,999,486	2,172,363	2,172,363	-	1,636,286	-	1,637,455
2030	5,162,342	2,334,628	2,334,628	-	1,651,182	-	1,652,624
2031	5,236,754	2,544,280	2,544,280	-	1,689,633	-	1,691,378
2032	5,212,887	2,847,221	2,847,221	-	1,775,412	-	1,777,527
2033	5,079,594	3,121,188	3,121,188	-	1,827,462	-	1,829,929
2034	4,822,529	3,418,271	3,418,271	-	1,879,253	-	1,882,089
2035	4,429,424	3,744,131	3,744,131	-	1,932,770	-	1,935,994
2036	3,888,344	3,899,541	3,888,344	11,197	1,884,709	7,188	1,893,590
2037	3,175,635	4,054,557	3,175,635	878,922	1,445,308	542,861	1,848,993
2038	9,512,361	4,302,892	4,302,892	-	1,838,826	-	1,842,772
2039	16,130,385	4,351,263	4,351,263	-	1,746,007	-	1,750,031
2040	23,057,914	4,334,042	4,334,042	-	1,632,955	-	1,636,978
2041	30,314,798	4,447,796	4,447,796	-	1,573,535	-	1,577,662
2042	37,926,659	4,526,295	4,526,295	-	1,503,574	-	1,507,757
2043	45,916,413	4,318,434	4,318,434	-	1,346,972	-	1,350,934
2044	54,313,933	4,245,990	4,245,990	-	1,243,545	-	1,247,401
2045	63,144,546	4,289,067	4,289,067	-	1,179,494	-	1,183,339
2046	72,435,010	4,231,454	4,231,454	-	1,092,630	-	1,096,366
2047	82,213,931	4,221,420	4,221,420	-	1,023,511	-	1,027,173
2048	92,509,139	4,349,737	4,349,737	-	990,255	-	993,957
2049	103,356,010	4,461,344	4,461,344	-	953,675	-	957,392
2050	107,294,820	4,505,397	4,505,397	-	904,312	-	907,980
2051	111,362,305	4,682,475	4,682,475	-	882,492	-	886,213
2052	115,563,831	4,757,533	4,757,533	-	841,914	-	845,598
2053	119,905,532	4,830,031	4,830,031	-	802,576	-	806,216
2054	124,391,262	4,973,394	4,973,394	-	775,960	-	779,603
2055	129,028,241	4,996,265	4,996,265	-	731,952	-	735,505
2056	133,823,539	5,067,856	5,067,856	-	697,127	-	700,622

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 3: Actuarial Present Value of Projected Benefit Payments

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g) = 6.48%
2057	138,780,492	5,024,949	5,024,949	-	649,037	-	652,394
2058	143,911,786	4,995,698	4,995,698	-	605,877	-	609,108
2059	149,223,294	4,912,566	4,912,566	-	559,432	-	562,504
2060	154,723,675	4,724,222	4,724,222	-	505,149	-	508,004
2061	160,423,082	4,769,493	4,769,493	-	478,863	-	481,646
2062	166,330,942	4,700,974	4,700,974	-	443,177	-	445,824
2063	172,457,864	4,544,119	4,544,119	-	402,244	-	404,710
2064	178,975,822	4,472,700	4,472,700	-	371,758	-	374,097
2065	185,991,188	4,437,036	4,437,036	-	346,285	-	348,519
2066	193,499,376	4,242,091	4,242,091	-	310,865	-	312,920
2067	201,696,876	4,125,655	4,125,655	-	283,880	-	285,802
2068	210,547,434	4,053,735	4,053,735	-	261,907	-	263,722
2069	220,047,536	3,904,016	3,904,016	-	236,839	-	238,519
2070	230,319,729	3,802,519	3,802,519	-	216,603	-	218,173
2071	241,364,411	3,674,539	3,674,539	-	196,538	-	197,994
2072	253,259,136	3,539,000	3,539,000	-	177,736	-	179,081
2073	266,066,962	3,399,769	3,399,769	-	160,322	-	161,561
2074	279,851,053	3,251,428	3,251,428	-	143,969	-	145,105
2075	294,684,272	3,111,934	3,111,934	-	129,382	-	130,424
2076	310,625,678	2,947,237	2,947,237	-	115,056	-	116,001
2077	327,773,325	2,791,708	2,791,708	-	102,333	-	103,189
2078	346,196,153	2,640,928	2,640,928	-	90,898	-	91,673
2079	365,972,145	2,490,828	2,490,828	-	80,499	-	81,198
2080	387,188,555	2,348,754	2,348,754	-	71,275	-	71,905
2081	409,930,723	2,200,176	2,200,176	-	62,691	-	63,256
2082	434,304,538	2,056,064	2,056,064	-	55,009	-	55,514
2083	460,411,447	1,914,678	1,914,678	-	48,100	-	48,549
2084	488,361,286	1,775,779	1,775,779	-	41,888	-	42,285
2085	518,271,278	1,638,054	1,638,054	-	36,281	-	36,631
2086	550,267,620	1,501,554	1,501,554	-	31,228	-	31,534
2087	584,484,661	1,368,362	1,368,362	-	26,721	-	26,987
2088	621,063,330	1,235,531	1,235,531	-	22,654	-	22,884

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 3: Actuarial Present Value of Projected Benefit Payments

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g) = 6.48%
2089	660,156,761	1,109,084	1,109,084	-	19,095	-	19,291
2090	701,921,821	982,408	982,408	-	15,882	-	16,048
2091	746,532,403	867,659	867,659	-	13,170	-	13,310
2092	794,161,151	754,836	754,836	-	10,759	-	10,874
2093	845,002,258	649,476	649,476	-	8,692	-	8,787
2094	899,256,821	555,446	555,446	-	6,980	-	7,057
2095	957,135,016	467,444	467,444	-	5,515	-	5,578
2096	1,018,866,156	389,302	389,302	-	4,313	-	4,362
2097	1,084,690,502	319,507	319,507	-	3,324	-	3,362
2098	1,154,865,494	259,387	259,387	-	2,534	-	2,563
2099	1,229,663,934	207,008	207,008	-	1,899	-	1,921
2100	1,309,378,354	163,382	163,382	-	1,407	-	1,424
2101	1,394,319,255	127,040	127,040	-	1,027	-	1,040
2102	1,484,818,838	97,241	97,241	-	738	-	747
2103	1,581,231,661	73,200	73,200	-	522	-	528
2104	1,683,936,140	54,139	54,139	-	362	-	367
2105	1,793,336,091	39,304	39,304	-	247	-	250
2106	1,909,862,356	27,980	27,980	-	165	-	167
2107	2,033,974,520	19,513	19,513	-	108	-	110
2108	2,166,162,717	13,316	13,316	-	69	-	70
2109	2,306,949,545	8,880	8,880	-	43	-	44
2110	2,456,892,097	5,783	5,783	-	27	-	27
2111	2,616,584,112	3,673	3,673	-	16	-	16
2112	2,786,658,287	2,273	2,273	-	9	-	9
2113	2,967,788,729	1,369	1,369	-	5	-	5
2114	3,160,693,583	803	803	-	3	-	3
2115	3,366,137,837	457	457	-	2	-	2
2116	3,584,936,325	253	253	-	1	-	1
2117	3,817,956,925	137	137	-	-	-	-
2118	4,066,123,984	72	72	-	-	-	-
2119	4,330,421,969	36	36	-	-	-	-
2120	4,611,899,360	18	18	-	-	-	-

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Table 3: Actuarial Present Value of Projected Benefit Payments

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g) = 6.48%
2121	4,911,672,800	9	9	-	-	-	-
2122	5,230,931,523	4	4	-	-	-	-
2123	5,570,942,068	2	2	-	-	-	-
2124	5,933,053,300	1	1	-	-	-	-
2125	6,318,701,763	-	-	-	-	-	-

APPENDIX B - SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2018	2,242,713	6.55	188,319	-	-	-	-	-	-	-	-	-
2019	-	6.55	-	-	-	-	-	-	-	-	-	-
2020	(3,592,503)	6.70	(536,194)	(536,194)	(375,339)	-	-	-	-	-	-	-
2021	6,649,997	7.38	901,084	901,084	901,084	901,084	342,409	-	-	-	-	-
2022	-	7.38	-	-	-	-	-	-	-	-	-	-
2023	(2,082,982)	7.19	(289,705)	(289,705)	(289,705)	(289,705)	(289,705)	(289,705)	(55,047)	-	-	-
2024	-	7.19	-	-	-	-	-	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			263,504	75,185	236,040	611,379	52,704	(289,705)	(55,047)	-	-	-

Year	Changes of Assumptions	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2018	-	6.55	-	-	-	-	-	-	-	-	-	-
2019	(6,007,783)	6.55	(917,218)	(504,468)	-	-	-	-	-	-	-	-
2020	83,922	6.70	12,525	12,525	8,765	-	-	-	-	-	-	-
2021	8,145,723	7.38	1,103,757	1,103,757	1,103,757	1,103,757	419,424	-	-	-	-	-
2022	(3,204,882)	7.38	(434,266)	(434,266)	(434,266)	(434,266)	(434,266)	(165,020)	-	-	-	-
2023	4,480,246	7.19	623,122	623,122	623,122	623,122	623,122	623,122	118,392	-	-	-
2024	(5,415,960)	7.19	(753,263)	(753,263)	(753,263)	(753,263)	(753,263)	(753,263)	(753,263)	(143,119)	-	-
Net Increase (Decrease) in OPEB Expense			(365,343)	47,407	548,115	539,350	(144,983)	(295,161)	(634,871)	(143,119)	-	-

APPENDIX B - SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

Year	Differences between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2018	(20,881)	5	-	-	-	-	-	-	-	-	-	-
2019	17,734	5	-	-	-	-	-	-	-	-	-	-
2020	89,861	5	17,973	-	-	-	-	-	-	-	-	-
2021	(463,399)	5	(92,680)	(92,679)	-	-	-	-	-	-	-	-
2022	595,186	5	119,037	119,037	119,038	-	-	-	-	-	-	-
2023	(35,479)	5	(7,096)	(7,096)	(7,096)	(7,095)	-	-	-	-	-	-
2024	(199,335)	5	(39,867)	(39,867)	(39,867)	(39,867)	(39,867)	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			(2,633)	(20,605)	72,075	(46,962)	(39,867)	-	-	-	-	-