

LYNNFIELD CENTER WATER DISTRICT

OTHER POSTEMPLOYMENT BENEFITS PROGRAM

FINANCIAL REPORTING AND DISCLOSURES

Governmental Accounting Standards Board Statements 74 and 75

Disclosures as of June 30, 2023

KMS Actuaries, LLC 52 Hunt Road Kingston, NH 03848

December, 2023



A C T U A R I E S



December 28, 2023

Board of Water Commissioners Lynnfield Center Water District 83 Phillips Road Lynnfield, MA 01940

Dear Members of the Board:

We are pleased to present the enclosed report of the July 1, 2021 actuarial valuation of the retiree health care benefits for the Lynnfield Center Water District. The valuation was prepared in accordance with and for the purpose of financial reporting and disclosures as of June 30, 2023 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, 2021 and rolled forward to the plan's measurement date of June 30, 2023.

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 Lynnfield Center Water District as well as health plan rates provided by the District. 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%, the rate that reflects the long-term expected rate of return on OPEB plan assets. 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.

Board of Water Commissioners December 28, 2023 Page 2

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 Essex Regional Retirement System's 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 Lynnfield Center Water District 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 Lynnfield Center Water District 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 Lynnfield Center Water District, other than as consulting actuary for this assignment, that would impair our independence.

All assumptions and methods have been selected based on the expertise of the undersigned actuaries, Linda L. Bournival, FSA, EA and Amanda J. Makarevich, FSA. The undersigned credentialed actuaries are Members of the American Academy of Actuaries and 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,

Linda L. Bournival, FSA, EA

Member, American Academy of Actuaries

(603) 792-9494

Amanda J. Makarevich, FSA

Member, American Academy of Actuaries

amarda Mahwavich

(603) 792-9494

TABLE OF CONTENTS

EXECUTIVE SU	JMMARY	1
SECTION 1	PRINCIPAL VALUATION RESULTS Exhibit 1.1 - OPEB Trust Assets Exhibit 1.2 - Total OPEB Liability Exhibit 1.3 - Development of Actuarially Determined Employer Contributions	5
SECTION 2	NOTES TO THE FINANCIAL STATEMENTS Exhibit 2.1 - Plan Description Exhibit 2.2 - Net OPEB Liability	8
SECTION 3	SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios Exhibit 3.2 - Investment Returns Exhibit 3.3 - Schedule of Employer Contributions	12
SECTION 4	EMPLOYER REPORTING AMOUNTS UNDER GASB 75 Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources Exhibit 4.2 - OPEB Expense	19
SECTION 5	SUMMARY OF PLAN PROVISIONS	22
SECTION 6	ACTUARIAL ASSUMPTIONS AND METHODS	23
SECTION 7	PLAN MEMBER INFORMATION Exhibit 7.1 - Active Members by Age and Years of Service Exhibit 7.2 - Retired Members, Covered Spouses and Survivors	28
SECTION 8	GLOSSARY OF TERMS	30
Appendix A	CALCULATION OF SINGLE DISCOUNT RATE	
Appendix B	SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES and DEFERRED INFLOWS OF RESOURCES	

Purpose of Report

This report presents the results of the actuarial valuation of the Lynnfield Center Water District's retiree health care benefits as of July 1, 2021. The valuation was prepared in accordance with and for the purpose of financial reporting and disclosures as of June 30, 2023 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 Lynnfield Center Water District. 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 Lynnfield Center Water District.

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.

Lynnfield Center Water District Other Postemployment Benefits Program

The Lynnfield Center Water District 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 District provides health care benefits for retirees and their dependents. Benefits are provided through the Massachusetts Interlocal Insurance Association, and the full cost of benefits is shared between the District and retirees.

Summary of Principal Results

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

Disclosure Date	June 30, 2023	June 30, 2022	% Change
Valuation Date	July 1, 2021	July 1, 2021	
Membership Data			
Active Plan Members	7	7	0.0%
Inactive Plan Members (excludes covered spouses)	5	5	0.0%
Total Plan Members	12	12	0.0%
Covered Spouses	2	1	100.0%
Covered Payroll	\$1,075,088	\$909,994	18.1%
Net OPEB Liability			
Discount Rate	6.00%	6.50%	
Total OPEB Liability (TOL)	\$345,946	\$297,317	16.4%
Fiduciary Net Position (FNP)	\$301,168	\$251,891	19.6%
Net OPEB Liability	\$44,778	\$45,426	(1.4%)
FNP as % of TOL	87.1%	84.7%	
OPEB Expense			
OPEB Expense	\$22,417	\$25,681	(12.7%)
Deferred Outflows	\$114,186	\$121,112	
Deferred Inflows	\$107,447	\$128,356	
Recognition Period	7.97	7.97	

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.

Changes of Assumptions

The discount rate changed from 6.5% as of June 30, 2022 to 6% as of June 30, 2023. In addition, the inflation rate was updated in this valuation. A summary of the impact on the Total OPEB Liability (TOL) of each assumption change is provided below:

 Decrease due to change in Inflation Assumption 	(1,000)
♦ Increase due to change in Discount Rate	25,000
Total	\$ 24,000

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 valuation. 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, 2023, is \$345,946. The Total OPEB Liability as of the prior measurement date, June 30, 2022, was \$297,317. During the current measurement period ending June 30, 2023, the Total OPEB Liability increased by \$48,629, or 16.4%. 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, 2023, is \$301,168. The Fiduciary Net Position as of the prior measurement date, June 30, 2022, was \$251,891. During the plan years ended June 30, 2023 and June 30, 2022, the actual rates of return were 8.58% and -15.06%, respectively. The expected long-term rate of return is 6.00%. The Fiduciary Net Position is shown in Section 1, Exhibit 1.1.

Employer Future Period Contributions

The District is assumed to contribute \$25,000 per year.

Discount Rate

As of the June 30, 2023 measurement date, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability. Projected benefit payments are discounted to their actuarial present value using a single discount rate of 6%.

OPEB Expense

The OPEB Expense for the current measurement period ending June 30, 2023, is \$22,417. Benefit changes are recognized immediately and experience gains and losses and assumption changes developed in this valuation are recognized over 7.97 years. Investment gains and losses are recognized over 5 years. The OPEB Expense for the prior measurement period was \$25,681. The development of the OPEB expense for the current measurement period is shown in Section 4, Exhibit 4.2.

COVID-19 Pandemic

The assumptions in this report, other than medical trend rates in the short term, do not reflect the potential impact of the COVID-19 pandemic on the OPEB program. Especially in the short range, it is very likely that the pandemic materially affected the economic, demographic and healthcare-specific experience in a way not anticipated by the assumptions on which the projections are based.

SECTION 1 - PRINCIPAL VALUATION RESULTS

Exhibit 1.1 - OPEB Trust Assets

The District has established an irrevocable trust pursuant to Section 20 of Chapter 32B of the Massachusetts General Laws 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 Board and is presented below:

Fignal	Vear	Ended	luna 3	\cap
i istai	I Cal	LIIUGU	iulie o	u

2023

2022

Trust Fund Composition at Fiscal Year-End				
Domestic Equity	\$116,012	\$112,509		
International Equity	58,331	50,482		
Domestic Bond	60,577	61,035		
International Bond	11,338	11,769		
Alternatives	26,046	14,977		
Cash	28,864	1,119		
Total Market Value of Assets	\$301,168	\$251,891		
Ass	et Activity			
Market value, beginning of year	\$251,891	\$267,507		
Employer Premiums	9,383	8,055		
OPEB Trust Contributions	27,665	25,000		
Benefit Payments	(9,383)	(8,055)		
Administrative Expenses	-	-		
Investment Return	21,612	(40,616)		
Market value, end of year	\$301,168	\$251,891		
Money-Weighted Rate of Return	8.58%	-15.06%		
(Gain) / Loss on OPEB Plan Investments				
Projected earnings	\$16,373	\$17,520		
Actual earnings	21,612	(40,616)		
(Gain) / Loss on OPEB plan investments	(\$5,239)	\$58,136		

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, 2023 measurement date was developed from an actuarial valuation as of July 1, 2021 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, 2022 to the end of the measurement period, June 30, 2023 is shown below:

Measurement Date June 30, 2023

1. Total OPEB Liability, beginning of year:		
, , , , ,	¢4.44.024	
a. Actives	\$141,931	
b. Retirees, Covered Spouses and Survivors	155,386	
c. Total OPEB Liability at 6.5% (a. + b.)		\$297,317
2. Service Cost		\$13,463
3. Expected Benefit Payments		
a. Current retirees	(\$9,124)	
b. Future retirees	(259)	
c. Total (a. + b.)	,	(\$9,383)
		(/ /
4. Interest [6.5% x (1.c. + 2. + .5 x 3.c)]		\$19,896
5. Changes of benefit terms		\$0
6. Differences between expected and actual experience		\$0
7. Changes of assumptions or other inputs		\$24,653
8. Total OPEB Liability, end of year (1.c. + 2. + 3.c. + 4. + 5. +	- 6. + 7.)	
a. Actives	\$182,891	
b. Retirees, Covered Spouses and Survivors	163,055	
c. Total OPEB Liability at 6% (a. + b.)		\$345,946

SECTION 1 - PRINCIPAL VALUATION RESULTS

Exhibit 1.3 - Development of Actuarially Determined Employer Contributions

The District is assumed to contribute \$25,000 per year.

Fiscal Year Ending

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.

lune 30, 2023

June 30, 2024

Fiscal Year Ending	June 30, 2023	June 30, 2024
Discount Rate	6.50%	6.00%
1. Normal Cost	\$13,463	\$15,745
2. Unfunded Actuarial Accrued Liability		
a. Actuarial Accrued Liability b. Actuarial Value of Plan Assets c. Unfunded Actuarial Accrued Liability (a b.)	\$297,317 \$251,891 \$45,426	\$345,946 \$301,168 \$44,778
3. Amortization of Unfunded Actuarial Accrued Liabili	ity	
a. Unfunded Actuarial Accrued Liability b. Amortization Period in years c. Payroll Growth Rate d. Amortization Factor e. Amortization Amount (3.a. / 3.d.)	\$45,426 30 0.0% 13.91 \$3,266	\$44,778 30 0.0% 14.59 \$3,069
4. Interest on 1. and 3.e.	\$1,087	\$1,129
5. Actuarially Determined Employer Contribution (1. + 3.e. + 4.)	\$17,816	\$19,943
6. Actual Employer Contribution to OPEB Trust	\$27,665	TBD
7. Expected Benefit Payments	\$9,383	
8. Total Contribution (6. + 7.)	\$37,048	

Exhibit 2.1 - Plan Description

Plan Administration

The Lynnfield Center Water District administers the retiree health care benefits program - a singleemployer 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, 2023, OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments ¹	5
Inactive plan members entitled to but not yet receiving benefit payments	0
Active plan members	7
	12

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 District provides health care benefits for retirees and their dependents. Benefits are provided through the Massachusetts Interlocal Insurance Association, and the full cost of benefits is shared between the District and retirees.

Employer Future Period Contributions

The District is assumed to contribute \$25,000 per year.

Exhibit 2.2 - Net OPEB Liability

The components of the net OPEB liability at June 30, 2023, were as follows:

Total OPEB liability	\$ 345,946
Fiduciary net position	 (301,168)
Net OPEB liability	\$ 44,778

Fiduciary net position as a percentage of the total OPEB liability

87.06%

Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of July 1, 2021, 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 judgment.
Discount rate	6%, net of investment expenses, including inflation.
Healthcare cost trend rate	7.5% for 2021, decreasing 0.6% per year to 6.5%, then grading down to an ultimate trend rate of 3.9%, utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate medical trend rate is reached in 2075.
Pre-Retirement Mortality - General employees	RP-2014 Employees Mortality Table, projected with generational mortality improvement using scale MP-2021.
Healthy Retiree Mortality - General employees	RP-2014 Healthy Annuitant Mortality Table, projected with generational mortality improvement using scale MP-2021.
Disabled Retiree Mortality - General employees	RP-2014 Healthy Annuitant Mortality Table set forward one year with full generational mortality improvement using Scale MP-2021.

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, 2023 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rates of Return ¹
Domestic Equity	34%	3.90%
International Equity	22%	5.75%
Domestic Bond	20%	1.39%
International Bond	4%	1.21%
Alternatives	20%	3.14%
Cash	0%	0.00%
Total	100%	

¹ provided by Bartholomew & Company.

Discount Rate

The discount rate used to measure the total OPEB liability was 6%. The projection of cash flows used to determine the discount rate assumed that contributions from the District 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 available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

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 percent, as well as what the net OPEB liability would be if it were calculated using a discount rate 1-percentage point lower (5 percent) or 1-percentage point higher (7 percent) than the current rate:

		Assumed					
	1%	1% Decrease (5%)		Discount Rate (6%)		1% Increase (7%)	
Total OPEB Liability	\$	406,865	\$	345,946	\$	297,938	
Fiduciary Net Position		(301,168)		(301,168)		(301,168)	
Net OPEB Liability	\$	105,697	\$	44,778	\$	(3,230)	
% Change in Net OPEB Liability		136.0%				-107.2%	

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 (6.5% year 1 decreasing to 2.9%) or 1-percentage point higher (8.5% year 1 decreasing to 4.9%) than the current healthcare cost trend rates:

			Н	Assumed ealthcare ost Trend			
	1%	Decrease	Rates		1% Increase		
	<u></u>	6.5% Year 1 Decreasing to		7.5% Year 1 Decreasing to		8.5% Year 1 Decreasing to	
		2.9%	3.9%		4.9%		
Total OPEB Liability	\$	286,907	\$	345,946	\$	424,653	
Fiduciary Net Position		(301,168)		(301,168)		(301,168)	
Net OPEB Liability	\$	(14,261)	\$	44,778	\$	123,485	
% Change in Net OPEB Liability		-131.8%				175.8%	

Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios

Figure Vega Fraded Ivano 20		0000		0000		0004		0000		0040
Fiscal Year Ended June 30		2023		2022		2021		2020		2019
		To	tal Ol	PEB Liability						
Service cost	\$	13,463	\$	14,861	\$	17,250	\$	8,646	\$	6,800
Interest		19,896		24,319		22,253		16,744		15,489
Changes of benefit terms		-		-		-		(9,381)		-
Differences between expected and										
actual experience		-		(88,903)		-		64,541		-
Changes of assumptions		24,653		(8,217)		(38,851)		53,728		24,398
Benefit payments		(9,383)		(8,055)		(7,537)		(6,998)		(6,974)
Net change in total OPEB liability	\$	48,629	\$	(65,995)	\$	(6,885)	\$	127,280	\$	39,713
Total OPEB liability-beginning	\$	297,317	\$	363,312	\$	370,197	\$	242,917	\$	203,204
Total OPEB liability-ending (a)	\$	345,946	\$	297,317	\$	363,312	\$	370,197	\$	242,917
				ary Net Positi						
Contributionsemployer	\$	37,048	\$	33,055	\$	37,537	\$	36,998	\$	35,974
Net investment income		21,612		(40,616)		45,033		9,487		6,605
Benefit payments		(9,383)		(8,055)		(7,537)		(6,998)		(6,974)
Administrative expenses		-		-		-		-		-
Other		-		-		-		-		-
Net change in plan fiduciary net										
position	\$	49,277	\$	(15,616)	\$	75,033	\$	39,487	\$	35,605
Plan fiduciary net position–beginning										
Train fluction y flet position—beginning	\$	251,891	\$	267,507	\$	192,474	\$	152,987	\$	117,382
Plan fiduciary net position–ending (b)	\$	301,168	\$	251,891	\$	267,507	\$	192,474	\$	152,987
Net OPEB liability-ending (a) - (b)	¢.	44,778	¢	45,426	¢	95,805	\$	177 702	\$	90.020
Not of EB habinty chang (a) (b)	\$	44,110	\$	45,426	\$	95,605	Φ	177,723	Φ	89,930
Plan fiduciary net position as a										
percentage of the total OPEB liability		87.06%		84.72%		73.63%		51.99%		62.98%
Covered payroll	\$	1,075,088	\$	909,994	\$	864,241	\$	813,725	\$	665,185
Net OPEB liability as a percentage of										
covered payroll		4.17%		4.99%		11.09%		21.84%		13.52%
Discount Rate		6.00%		6.50%		6.50%		5.80%		6.75%

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

Fiscal Year Ended June 30		2018		2017	2016	2015	2014			
		To	tal OF	PEB Liability						
Service cost	\$	4,740	\$	4,558						
Interest		16,491	·	17,007						
Changes of benefit terms		-		-						
Differences between expected and										
actual experience		(34,161)		-						
Changes of assumptions		13,611		-						
Benefit payments		(25,247)		(31,985)						
Net change in total OPEB liability	\$	(24,566)	\$	(10,420)						
Total OPEB liability-beginning	\$	227,770	\$	238,190						
Total OPEB liability-ending (a)	\$	203,204	\$	227,770						
Plan Fiduciary Net Position										
Contributionsemployer	\$	45,247	\$	54,377						
Net investment income		3,849		3,988						
Benefit payments		(25,247)		(31,985)						
Administrative expenses		-		-						
Other		-		-						
Net change in plan fiduciary net position	\$	23,849	\$	26,380						
Plan fiduciary net position-beginning	\$	93,533	\$	67,153						
Plan fiduciary net position–ending (b)	\$	117,382	\$	93,533						
Net OPEB liability-ending (a) – (b)	\$	85,822	\$	134,237						
Plan fiduciary net position as a percentage of the total OPEB liability		57.77%		41.06%						
Covered payroll	\$	713,838	\$	619,743						
Net OPEB liability as a percentage of covered payroll		12.02%		21.66%						
Discount Rate		7.50%		7.50%						

Note: Only 7 years are presented here and on the previous page, beginning with the year of implementation; 10 years of information will be required.

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 valuation.

Changes of Assumptions

The discount rate changed from 6.5% as of June 30, 2022 to 6% as of June 30, 2023. In addition, the inflation rate was updated in this valuation.

Exhibit 3.2 - Investment Returns

Fiscal Year Ended June 30	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment	8.58%	-15.06%	23.40%	5.92%	5.63%	4.12%	5.94%			
expenses										

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 7 years are presented here, beginning with the year of implementation; 10 years of information will be required.

Exhibit 3.2 - Investment Returns

Calculation of Money-Weighted Rate of Return

	Ne	Plan estments/ et External ash Flows (a)	Periods Invested (b)	Period Weight (c)=(b)÷12	(d)=(a) x 1+r _{mw}) ^(c)
Beginning value - July 1, 2022	\$	251,891	12	1.00	\$ 273,503
Monthly net external cash flows:					
July		-	11	0.92	-
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		27,665	0	0.00	27,665
Ending value - June 30, 2023					\$ 301,168

Money-weighted rate of return:

8.58%

Exhibit 3.3 - Schedule of Employer Contributions

Fiscal Year Ended June 30	2023	2022	2021	2020	2019
Actuarially determined contribution	\$ 17,816	\$ 23,162	\$ 30,887	\$ 16,293	\$ 14,575
Contributions in relation to the actuarially determined contribution	37,048	33,055	37,537	 36,998	35,974
Contribution deficiency (excess)	\$ (19,232)	\$ (9,893)	\$ (6,650)	\$ (20,705)	\$ (21,399)
Covered payroll	\$ 1,075,088	\$ 909,994	\$ 864,241	\$ 813,725	\$ 665,185
Contributions as a percentage of covered payroll	3.45%	3.63%	4.34%	4.55%	5.41%
Discount rate	6.50%	6.50%	5.80%	6.75%	7.50%
Inflation	2.50%	2.40%	2.20%	2.40%	2.60%

Exhibit 3.3 - Schedule of Employer Contributions, continued

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 16,458	\$ 26,138			
Contributions in relation to the actuarially determined contribution	45,247	54,377			
Contribution deficiency (excess)	\$ (28,789)	\$ (28,239)			
Covered payroll	\$ 713,838	\$ 619,743			
Contributions as a percentage of covered payroll	6.34%	8.77%			
Discount rate	7.50%	5.00%			
Inflation	2.60%	2.60%			

Note: Only 7 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	7.5% for 2021, decreasing 0.6% per year to 6.5%, then grading down to an ultimate trend rate of 3.9%, utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate medical trend rate is reached in 2075.

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.

					nces at 30, 2023
	Experience Losses	Experience Gains			Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)
2018	\$ -	\$ 34,161	\$ (24,288)	\$ -	\$ 9,873
2019	-	-	-	-	-
2020	64,541	-	31,068	33,473	-
2021	-	-	-	-	-
2022	-	88,903	(22,310)	-	66,593
2023	-	-	-		
Total				\$ 33,473	\$ 76,466

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.

					nces at 30, 2023
	Increases in the Total OPEB Liability	Decreases in the Total OPEB Liability	Amounts Recognized in OPEB Expense through June 30, 2023	Deferred Outflows of Resources	Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(p) + (c)
2018	\$ 13,611	\$ -	\$ 9,678	\$ 3,933	\$ -
2019	24,398	-	14,455	9,943	-
2020	53,728	-	25,860	27,868	-
2021	-	38,851	(14,025)	-	24,826
2022	-	8,217	(2,062)	-	6,155
2023	24,653	-	3,093	21,560	
Total				\$ 63,304	\$ 30,981

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.

					nces at 30, 2023
	Investment Earnings Less Than Projected	Investment Earnings Greater Than Projected	Earnings OPEB Expense Greater Than through		Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)
2018	\$ 3,166	\$ -	\$ 3,166	\$ -	\$ -
2019	2,199	-	2,199	-	-
2020	1,334	-	1,068	266	-
2021	-	33,870	(20,322)	-	13,548
2022	58,136	-	23,254	34,882	-
2023	-	5,239	(1,048)	-	4,191
Subtotal				\$ 35,148	\$ 17,739
Net				\$ 17,409	\$ -

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

Year end	led J	June	30
----------	-------	------	----

	2024	\$ 4,991
	2025	\$ 4,725
	2026	\$ 12,865
	2027	\$ 687
	2028	\$ (9,355)
	Thereafter	\$ (7,174)
De	ferred Outflows	\$ 114,186
D	eferred Inflows	\$ 107,447

Exhibit 4.2 - OPEB Expense

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, 2023 is presented below:

Fiscal Year Ended June 30, 2023

Measurement Date		6/30/2023					
1. Service cost	\$	13,463					
2. Interest on the total OPEB liability							
a. Total OPEB liability, beginning of year 297,317							
b. Service cost, beginning of year 13,463							
c. Benefit payments (9,383)	<u>)</u>						
d. Interest on total OPEB liability = 6.5% times (a.+ b. + .5 times c.)		19,896					
3. Differences between expected and actual experience		(7,436)					
4. Changes of benefit terms		-					
5. Changes of assumptions		8,356					
6. Projected earnings on OPEB plan investments							
a. Plan fiduciary net position, beginning of year 251,891							
b. Contributions - Employer 37,048							
c. Benefit payments (9,383))						
d. Administrative expenses and other							
e. Total projected earnings		(16,373)					
7. Differences between projected and actual earnings							
on OPEB plan investments		4,511					
8. OPEB plan administrative expenses							
9. Other changes in fiduciary net position							
10. Total OPEB Expense \$							

C /20 /0000

SECTION 5 - SUMMARY OF PLAN PROVISIONS

Eligibility for Postemployment Benefits

Employees of the District and their dependents are eligible for postemployment medical insurance based on the eligibility requirements under the Essex Regional Retirement System.

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

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, 2022	Individual	2-Person	Family
Blue Care Elect Preferred	\$1,471.43	\$2,942.88	\$4,267.18
HMO Blue NE	\$1,215.76	\$2,406.40	\$3,525.74

Medicare Plans - January 1, 2022	
Medex	\$228.54

Participant Contributions

Retired employees contribute 50% of the total medical premium.

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

Dental Coverage

Dental coverage is not offered to retirees.

Life Insurance Coverage

Life insurance coverage is not offered to retirees.

Valuation Date July 1, 2021

Disclosure Date June 30, 2023

GASB 75 Reporting Date June 30, 2023

Long-Term Expected Rate of Return

6%, net of investment expenses and including inflation at 2.5%. Previously, 6.5%

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.

or return

Municipal Bond Rate 3.65%, based on the Bond Buyer 20-Bond GO Index published on June 30,

2023.

Discount Rate (GASB) 6%, compounded annually, for the measurement as of June 30, 2023. 6.5%,

compounded annually, for the measurement as of June 30, 2022.

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.

Discount Rate (ADEC) 6.5%, compounded annually, for development of the Actuarially Determined

Contribution (ADEC) as of June 30, 2023.

Amortization Method Level dollar amount over 30 years on an open amortization period for partial

pre-funding.

Medical Trend Rates

Year	Trend
1	7.50%
2	6.90%
3	6.30%
4	5.70%
Ultimate	3.90%

Trend rates after year 4 grade down to the ultimate rate of 3.9 percent utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate trend 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 coverage is not offered to retirees.

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 - 100% of eligible retired employees will elect to participate.

Dental - Not offered to retired employees. Life - Not offered to retired employees.

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.

50% of employees are assumed to retire with a covered spouse.

For current retirees, the actual census information is used.

Medical Per Capita Costs

The following annual per capita costs are for the fiscal year beginning July 1, 2021 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	Male	Female
Under 20	\$7,640	\$8,969
20-24	6,020	9,550
25-29	6,265	14,088
30-34	7,869	17,800
35-39	9,870	18,335
40-44	12,300	18,778
45-49	15,524	20,612
50-54	20,459	24,248
55-59	26,586	28,038
60-64	34,119	33,370
65-69	2,082	2,027
70-74	2,495	2,391
75-79	2,946	2,775
80-84	3,386	3,182
85-89	3,772	3,557
90-94	4,106	3,796
95+	4,364	3,671

Retiree Contributions

Annual per capita participant contributions for the fiscal year beginning July 1, 2021 are as follows:

Plan	Contribution
Non-Medicare	\$ 8,213
Medicare	1,323

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 disclosure date.

Census Data

Employee and retiree data were compiled and submitted by the District as of June 30, 2022. We made reasonable adjustments for missing or invalid data.

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.

Pre-Retirement Mortality

Post-retirement mortality rates for General employees are based on the RP-2014 Employees Mortality Table, projected with generational mortality improvement using scale MP-2021.

Healthy Retiree Mortality

Post-retirement mortality rates for General retirees are based on the RP-2014 Healthy Annuitant Mortality Table, projected with generational mortality improvement using scale MP-2021.

Disabled Retiree Mortality

Disabled retiree mortality rates for General employees are based on the RP-2014 Healthy Annuitant Mortality Table set forward one year with full generational mortality improvement using Scale MP-2021.

Turnover Rates

Turnover rates for General employees are as follows:

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

Disability Rates

Disability rates for General employees are as follows:

General E	mployees
Age	Rate
25	0.02%
30	0.03%
35	0.06%
40	0.10%
45	0.15%
50	0.19%
55	0.24%
60	0.28%

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

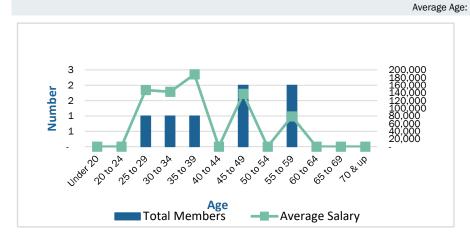
Retirement Rates

100% at age 65.

SECTION 7 - PLAN MEMBER INFORMATION

Exhibit 7.1 - Active Members by Age and Years of Service as of July 1, 2021

						Years of	Service					
Age	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	Total	Total Salary	Average Salary
Under 20	-	-	-	-	-	-	-	-	-	-	-	-
20 to 24	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	-	1	-	-	-	-	-	-	-	1	147,244	147,244
30 to 34	-	1	-	-	-	-	-	-	-	1	142,633	142,633
35 to 39	-	-	1	-	-	-	-	-	-	1	188,276	188,276
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	2	-	-	-	-	-	-	-	-	2	274,711	137,355
50 to 54	-	-	-	-	-	-	-	-	-	-	-	-
55 to 59	1	-	-	1	-	-	-	-	-	2	157,130	78,565
60 to 64	-	-	-	-	-	-	-	-	-	-	-	-
65 to 69	-	-	-	-	-	-	-	-	-	-	-	-
70 & up	-	-	-	-	-	-	-	-	-	-	-	-
Total	3	2	1	1	-	-	-	-	-	7	909,994	129,999
Total Salary	275,901	289,877	188,276	155,940	-	-	-	-	-			
Average Salary	91,967	144,939	188,276	155,940	-	-	-	-	-			





SECTION 7 - PLAN MEMBER INFORMATION

Exhibit 7.2 - Retired Members, Covered Spouses and Survivors as of July 1, 2021

		Non-Medicare Plans	Medicare Plans			
Age	alue catelled protested	tino gine zer	nedet	Total		
Under 40	0	0	0	0		
40 to 44	0	0	0	0		
45 to 49	0	0	0	0		
50 to 54	0	0	0	0		
55 to 59	0	0	0	0		
60 to 64	0	0	0	0		
65 to 69	0	0	1	1		
70 to 74	0	0	1	1		
75 to 79	0	0	2	2		
80 to 84	0	0	1	1		
85 to 89	0	0	0	0		
90+	0	0	0	0		
Total	0	0	5	5		
Covered						
Spouses	0	0	1	1		

Average Age: 75.4

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.

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%, a long-term investment return rate of 6% and a municipal bond rate of 3.65%, based on the Bond Buyer 20-Bond GO Index published on June 30, 2023. The OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability. Projected benefit payments are discounted to their actuarial present value using a single discount rate of 6%.

Below are the historical Bond Buyer 20-Bond GO Indices and the District's discount rate used in disclosures since the implementation of GASB 74 and GASB 75:



Table 1: Projection of Contributions

		Projected Payroll		Projected Contributions						
Year	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) * 1.73%	Current Plan Members			
2023	880,038	-	880,038	9,383	27,665	-	37,048			
2024	851,246	59,593	910,839	10,381	25,000	1,030	34,351			
2025	827,985	114,733	942,718	11,762	25,000	1,983	34,779			
2026	808,689	167,024	975,713	12,835	25,000	2,887	34,948			
2027	793,015	216,848	1,009,863	13,243	25,000	3,749	34,494			
2028	780,341	264,867	1,045,208	14,573	25,000	4,579	34,994			
2029	770,395	311,395	1,081,790	15,323	25,000	5,383	34,940			
2030	762,812	356,841	1,119,653	16,391	25,000	6,169	35,222			
2031	757,404	401,437	1,158,841	34,906	25,000	6,940	52,966			
2032	572,920	626,480	1,199,400	36,260	25,000	10,830	50,430			
2033	568,606	672,773	1,241,379	37,929	25,000	11,630	51,299			
2034	571,194	713,633	1,284,827	19,766	25,000	12,336	32,430			
2035	574,805	754,991	1,329,796	19,763	25,000	13,051	31,712			
2036	579,413	796,926	1,376,339	20,829	25,000	13,776	32,053			
2037	587,748	836,763	1,424,511	20,864	25,000	14,465	31,399			
2038	596,564	877,805	1,474,369	21,099	25,000	15,174	30,925			
2039	540,247	985,725	1,525,972	22,043	25,000	17,040	30,003			
2040	548,831	1,030,550	1,579,381	32,632	25,000	17,815	39,817			
2041	453,925	1,180,734	1,634,659	33,923	25,000	20,411	38,512			
2042	462,026	1,229,846	1,691,872	34,403	25,000	21,260	38,143			
2043	470,676	1,280,412	1,751,088	22,773	25,000	22,134	25,639			
2044	479,890	1,332,486	1,812,376	23,667	25,000	23,034	25,633			
2045	489,405	1,386,404	1,875,809	24,627	25,000	23,966	25,661			
2046	499,219	1,442,243	1,941,462	25,723	25,000	24,932	25,791			
2047	509,089	1,500,324	2,009,413	26,598	25,000	25,936	25,662			
2048	518,968	1,560,774	2,079,742	28,026	25,000	26,981	26,045			
2049	528,832	1,623,701	2,152,533	29,373	25,000	28,069	26,304			
2050	538,669	1,689,203	2,227,872	31,807	25,000	29,201	27,606			
2051	548,455	1,757,393	2,305,848	33,437	25,000	30,380	28,057			
2052	558,155	1,828,398	2,386,553	65,167	25,000	31,607	58,560			
2053	308,166	2,161,916	2,470,082	69,031	25,000	37,373	56,658			
2054	313,688	2,242,847	2,556,535	71,735	25,000	38,772	57,963			
2055	319,152	2,326,862	2,646,014	64,654	25,000	40,224	49,430			

Table 1: Projection of Contributions

		Projected Payroll		Projected Contributions						
Year	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) * 1.73%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)			
2056	155,883	2,582,741	2,738,624	67,040	25,000	44,647	47,393			
2057	158,584	2,675,892	2,834,476	69,951	25,000	46,257	48,694			
2058	161,250	2,772,433	2,933,683	65,635	25,000	47,926	42,709			
2059	-	3,036,362	3,036,362	66,879	25,000	52,489	39,390			
2060	-	3,142,635	3,142,635	70,542	25,000	54,326	41,216			
2061	-	3,252,627	3,252,627	36,786	25,000	56,227	5,559			
2062	-	3,366,469	3,366,469	37,837	25,000	58,195	4,642			
2063	-	3,484,295	3,484,295	39,882	25,000	60,232	4,650			
2064	-	3,606,245	3,606,245	38,925	25,000	62,340	1,585			
2065	-	3,732,464	3,732,464	41,351	25,000	64,522	1,829			
2066	-	3,863,100	3,863,100	41,213	25,000	66,780	-			
2067	-	3,998,309	3,998,309	42,514	25,000	69,118	-			
2068	-	4,138,250	4,138,250	44,403	25,000	71,537	-			
2069	-	4,283,089	4,283,089	43,683	25,000	74,041	-			
2070	-	4,432,997	4,432,997	46,258	25,000	76,632	-			
2071	-	4,588,152	4,588,152	46,425	25,000	79,314	-			
2072	-	4,748,737	4,748,737	47,629	25,000	82,090	-			
2073	-	4,914,943	4,914,943	49,743	25,000	84,963	-			
2074	-	5,086,966	5,086,966	48,964	25,000	87,937	-			
2075	-	5,265,010	5,265,010	50,965	25,000	91,015	-			
2076	-	5,449,285	5,449,285	50,986	25,000	94,200	-			
2077	-	5,640,010	5,640,010	51,210	25,000	97,497	-			
2078	-	5,837,410	5,837,410	52,487	25,000	100,910	-			
2079	-	6,041,719	6,041,719	50,725	25,000	104,442	-			
2080	-	6,253,179	6,253,179	50,694	25,000	108,097	-			
2081	-	6,472,040	6,472,040	49,292	25,000	111,881	-			
2082	-	6,698,561	6,698,561	47,274	25,000	115,796	-			
2083	-	6,933,011	6,933,011	46,118	25,000	119,849	-			
2084	-	7,175,666	7,175,666	42,678	25,000	124,044				
2085	-	7,426,814	7,426,814	39,439	25,000	128,386	-			
2086	-	7,686,752	7,686,752	36,234	25,000	132,879	-			
2087	-	7,955,788	7,955,788	32,338	25,000	137,530	-			
2088	-	8,234,241	8,234,241	28,895	25,000	142,343	_			
	-									

Table 1: Projection of Contributions

		Projected Payroll			Projected	l Contributions	
Year	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) * 1.73%	Current Plan Members
2089	-	8,522,439	8,522,439	25,066	25,000	147,325	-
2090	-	8,820,724	8,820,724	21,426	25,000	152,482	-
2091	-	9,129,449	9,129,449	17,792	25,000	157,819	-
2092	-	9,448,980	9,448,980	14,711	25,000	163,342	-
2093	-	9,779,694	9,779,694	11,958	25,000	169,059	-
2094	-	10,121,983	10,121,983	9,549	25,000	174,976	-
2095	-	10,476,252	10,476,252	7,483	25,000	181,100	-
2096	-	10,842,921	10,842,921	5,750	25,000	187,439	-
2097	-	11,222,423	11,222,423	4,330	25,000	193,999	-
2098	-	11,615,208	11,615,208	3,191	25,000	200,789	-
2099	-	12,021,740	12,021,740	2,299	25,000	207,817	-
2100	-	12,442,501	12,442,501	1,619	25,000	215,090	-
2101	-	12,877,989	12,877,989	1,112	25,000	222,619	-
2102	-	13,328,719	13,328,719	745	25,000	230,410	-
2103	-	13,795,224	13,795,224	485	25,000	238,475	-
2104	-	14,278,057	14,278,057	308	25,000	246,821	-
2105	-	14,777,789	14,777,789	190	25,000	255,460	-
2106	-	15,295,012	15,295,012	114	25,000	264,401	-
2107	-	15,830,337	15,830,337	66	25,000	273,655	-
2108	-	16,384,399	16,384,399	37	25,000	283,233	-
2109	-	16,957,853	16,957,853	20	25,000	293,146	-
2110	-	17,551,378	17,551,378	11	25,000	303,406	-
2111	-	18,165,676	18,165,676	6	25,000	314,026	-
2112	-	18,801,475	18,801,475	3	25,000	325,016	-
2113	-	19,459,527	19,459,527	2	25,000	336,392	-
2114	-	20,140,610	20,140,610	1	25,000	348,166	-
2115	-	20,845,531	20,845,531	-	25,000	360,352	-
2116	-	21,575,125	21,575,125	-	25,000	372,964	-
2117	-	22,330,254	22,330,254	-	25,000	386,018	-
2118	-	23,111,813	23,111,813	-	25,000	399,528	-

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)
2023	251,891	37,048	9,383	-	21,612	301,168
2024	301,168	34,351	10,381	-	18,789	343,927
2025	343,927	34,779	11,762	-	21,326	388,270
2026	388,270	34,948	12,835	-	23,960	434,343
2027	434,343	34,494	13,243	-	26,698	482,292
2028	482,292	34,994	14,573	-	29,550	532,263
2029	532,263	34,940	15,323	-	32,524	584,404
2030	584,404	35,222	16,391	-	35,629	638,864
2031	638,864	52,966	34,906	-	38,874	695,798
2032	695,798	50,430	36,260	-	42,173	752,141
2033	752,141	51,299	37,929	-	45,530	811,041
2034	811,041	32,430	19,766	-	49,042	872,747
2035	872,747	31,712	19,763	-	52,723	937,419
2036	937,419	32,053	20,829	-	56,582	1,005,225
2037	1,005,225	31,399	20,864	-	60,630	1,076,390
2038	1,076,390	30,925	21,099	-	64,878	1,151,094
2039	1,151,094	30,003	22,043	-	69,304	1,228,358
2040	1,228,358	39,817	32,632	-	73,917	1,309,460
2041	1,309,460	38,512	33,923	-	78,705	1,392,754
2042	1,392,754	38,143	34,403	-	83,677	1,480,171
2043	1,480,171	25,639	22,773	-	88,896	1,571,933
2044	1,571,933	25,633	23,667	-	94,375	1,668,274
2045	1,668,274	25,661	24,627	-	100,127	1,769,435
2046	1,769,435	25,791	25,723	-	106,168	1,875,671
2047	1,875,671	25,662	26,598	-	112,512	1,987,247
2048	1,987,247	26,045	28,026	-	119,175	2,104,441
2049	2,104,441	26,304	29,373	-	126,174	2,227,546
2050	2,227,546	27,606	31,807	-	133,527	2,356,872
2051	2,356,872	28,057	33,437	-	141,251	2,492,743
2052	2,492,743	58,560	65,167	-	149,366	2,635,502
2053	2,635,502	56,658	69,031	-	157,759	2,780,888
2054	2,780,888	57,963	71,735	-	166,440	2,933,556
2055	2,933,556	49,430	64,654	-	175,557	3,093,889
2056	3,093,889	47,393	67,040	-	185,044	3,259,286

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)
2057	3,259,286	48,694	69,951	-	194,919	3,432,948
2058	3,432,948	42,709	65,635	-	205,289	3,615,311
2059	3,615,311	39,390	66,879	-	216,094	3,803,916
2060	3,803,916	41,216	70,542	-	227,355	4,001,945
2061	4,001,945	5,559	36,786	-	239,180	4,209,898
2062	4,209,898	4,642	37,837	-	251,598	4,428,301
2063	4,428,301	4,650	39,882	-	264,641	4,657,710
2064	4,657,710	1,585	38,925	-	278,342	4,898,712
2065	4,898,712	1,829	41,351	-	292,737	5,151,927
2066	5,151,927	-	41,213	-	307,879	5,418,593
2067	5,418,593	-	42,514	-	323,840	5,699,919
2068	5,699,919	-	44,403	-	340,663	5,996,179
2069	5,996,179	-	43,683	-	358,460	6,310,956
2070	6,310,956	-	46,258	-	377,270	6,641,968
2071	6,641,968	-	46,425	-	397,125	6,992,668
2072	6,992,668	-	47,629	-	418,131	7,363,170
2073	7,363,170	-	49,743	-	440,298	7,753,725
2074	7,753,725	-	48,964	-	463,755	8,168,516
2075	8,168,516	-	50,965	-	488,582	8,606,133
2076	8,606,133	-	50,986	-	514,838	9,069,985
2077	9,069,985	-	51,210	-	542,663	9,561,438
2078	9,561,438	-	52,487	-	572,112	10,081,063
2079	10,081,063	-	50,725	-	603,342	10,633,680
2080	10,633,680	-	50,694	-	636,500	11,219,486
2081	11,219,486	-	49,292	-	671,690	11,841,884
2082	11,841,884	-	47,274	-	709,095	12,503,705
2083	12,503,705	-	46,118	-	748,839	13,206,426
2084	13,206,426	-	42,678	-	791,105	13,954,853
2085	13,954,853	-	39,439	-	836,108	14,751,522
2086	14,751,522	-	36,234	-	884,004	15,599,292
2087	15,599,292	-	32,338	-	934,987	16,501,941
2088	16,501,941	-	28,895	-	989,250	17,462,296
2089	17,462,296	-	25,066	-	1,046,986	18,484,216
2090	18,484,216	-	21,426	-	1,108,410	19,571,200

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)
2091	19,571,200	-	17,792	-	1,173,738	20,727,146
2092	20,727,146	-	14,711	-	1,243,187	21,955,622
2093	21,955,622	-	11,958	-	1,316,979	23,260,643
2094	23,260,643	-	9,549	-	1,395,352	24,646,446
2095	24,646,446	-	7,483	-	1,478,562	26,117,525
2096	26,117,525	-	5,750	-	1,566,879	27,678,654
2097	27,678,654	-	4,330	-	1,660,589	29,334,913
2098	29,334,913	-	3,191	-	1,759,999	31,091,721
2099	31,091,721	-	2,299	-	1,865,434	32,954,856
2100	32,954,856	-	1,619	-	1,977,243	34,930,480
2101	34,930,480	-	1,112	-	2,095,795	37,025,163
2102	37,025,163	-	745	-	2,221,487	39,245,905
2103	39,245,905	-	485	-	2,354,740	41,600,160
2104	41,600,160	-	308	-	2,496,000	44,095,852
2105	44,095,852	-	190	-	2,645,745	46,741,407
2106	46,741,407	-	114	-	2,804,481	49,545,774
2107	49,545,774	-	66	-	2,972,744	52,518,452
2108	52,518,452	-	37	-	3,151,106	55,669,521
2109	55,669,521	-	20	-	3,340,171	59,009,672
2110	59,009,672	-	11	-	3,540,580	62,550,241
2111	62,550,241	-	6	-	3,753,014	66,303,249
2112	66,303,249	-	3	-	3,978,195	70,281,441
2113	70,281,441	-	2	-	4,216,886	74,498,325
2114	74,498,325	-	1	-	4,469,899	78,968,223
2115	78,968,223	-	-	-	4,738,093	83,706,316
2116	83,706,316	-	-	-	5,022,379	88,728,695
2117	88,728,695	-	-	-	5,323,722	94,052,417
2118	94,052,417	-	-	-	5,643,145	99,695,562

Table 3: Actuarial Present Value of Projected Benefit Payments - End of Measurement Period

			Projected Bend	efit Payments	Actuarial Present	Value of Projected	Benefit Payments
Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	"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%
2024	301,168	10,381	10,381	-	10,083	-	10,083
2025	343,927	11,762	11,762	-	10,778	-	10,778
2026	388,270	12,835	12,835	-	11,095	-	11,095
2027	434,343	13,243	13,243	-	10,800	-	10,800
2028	482,292	14,573	14,573	-	11,212	-	11,212
2029	532,263	15,323	15,323	-	11,121	-	11,121
2030	584,404	16,391	16,391	-	11,223	-	11,223
2031	638,864	34,906	34,906	-	22,548	-	22,548
2032	695,798	36,260	36,260	-	22,097	-	22,097
2033	752,141	37,929	37,929	-	21,805	-	21,805
2034	811,041	19,766	19,766	-	10,720	-	10,720
2035	872,747	19,763	19,763	-	10,112	-	10,112
2036	937,419	20,829	20,829	-	10,054	-	10,054
2037	1,005,225	20,864	20,864	-	9,501	-	9,501
2038	1,076,390	21,099	21,099	-	9,064	-	9,064
2039	1,151,094	22,043	22,043	-	8,934	-	8,934
2040	1,228,358	32,632	32,632	-	12,477	-	12,477
2041	1,309,460	33,923	33,923	-	12,236	-	12,236
2042	1,392,754	34,403	34,403	-	11,707	-	11,707
2043	1,480,171	22,773	22,773	-	7,311	-	7,311
2044	1,571,933	23,667	23,667	-	7,168	-	7,168
2045	1,668,274	24,627	24,627	-	7,036	-	7,036
2046	1,769,435	25,723	25,723	-	6,933	-	6,933
2047	1,875,671	26,598	26,598	-	6,763	-	6,763
2048	1,987,247	28,026	28,026	-	6,723	-	6,723
2049	2,104,441	29,373	29,373	-	6,647	-	6,647
2050	2,227,546	31,807	31,807	-	6,791	-	6,791
2051	2,356,872	33,437	33,437	-	6,735	_	6,735
2052	2,492,743	65,167	65,167	-	12,383	-	12,383
2053	2,635,502	69,031	69,031	-	12,374	_	12,374
2054	2,780,888	71,735	71,735	-	12,131	-	12,131
2055	2,933,556	64,654	64,654	-	10,315	_	10,315
	, ,	•	,				

Table 3: Actuarial Present Value of Projected Benefit Payments - End of Measurement Period

			Projected Bend	efit Payments	Actuarial Present	Value of Projected	Benefit Payments
Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	"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%
2056	3,093,889	67,040	67,040	-	10,090	-	10,090
2057	3,259,286	69,951	69,951	-	9,932	-	9,932
2058	3,432,948	65,635	65,635	-	8,792	-	8,792
2059	3,615,311	66,879	66,879	-	8,451	-	8,451
2060	3,803,916	70,542	70,542	-	8,410	-	8,410
2061	4,001,945	36,786	36,786	-	4,137	-	4,137
2062	4,209,898	37,837	37,837	-	4,015	-	4,015
2063	4,428,301	39,882	39,882	-	3,992	-	3,992
2064	4,657,710	38,925	38,925	-	3,676	-	3,676
2065	4,898,712	41,351	41,351	-	3,684	-	3,684
2066	5,151,927	41,213	41,213	-	3,464	-	3,464
2067	5,418,593	42,514	42,514	-	3,371	-	3,371
2068	5,699,919	44,403	44,403	-	3,321	-	3,321
2069	5,996,179	43,683	43,683	-	3,082	-	3,082
2070	6,310,956	46,258	46,258	-	3,079	-	3,079
2071	6,641,968	46,425	46,425	-	2,916	-	2,916
2072	6,992,668	47,629	47,629	-	2,822	-	2,822
2073	7,363,170	49,743	49,743	-	2,780	-	2,780
2074	7,753,725	48,964	48,964	-	2,582	-	2,582
2075	8,168,516	50,965	50,965	-	2,535	-	2,535
2076	8,606,133	50,986	50,986	-	2,393	-	2,393
2077	9,069,985	51,210	51,210	-	2,267	-	2,267
2078	9,561,438	52,487	52,487	-	2,192	-	2,192
2079	10,081,063	50,725	50,725	-	1,999	-	1,999
2080	10,633,680	50,694	50,694	-	1,884	-	1,884
2081	11,219,486	49,292	49,292	-	1,729	-	1,729
2082	11,841,884	47,274	47,274	-	1,564	-	1,564
2083	12,503,705	46,118	46,118	-	1,439	-	1,439
2084	13,206,426	42,678	42,678	-	1,257	-	1,257
2085	13,954,853	39,439	39,439	-	1,096	-	1,096
2086	14,751,522	36,234	36,234	-	950	-	950
2087	15,599,292	32,338	32,338	-	799	-	799

Table 3: Actuarial Present Value of Projected Benefit Payments - End of Measurement Period

			Projected Bene	efit Payments	Actuarial Present	Value of Projected	Benefit Payments
Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	"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%
2088	16,501,941	28,895	28,895	-	674	-	674
2089	17,462,296	25,066	25,066	-	552	-	552
2090	18,484,216	21,426	21,426	-	445	-	445
2091	19,571,200	17,792	17,792	-	348	-	348
2092	20,727,146	14,711	14,711	-	272	-	272
2093	21,955,622	11,958	11,958	-	208	-	208
2094	23,260,643	9,549	9,549	-	157	-	157
2095	24,646,446	7,483	7,483	-	116	-	116
2096	26,117,525	5,750	5,750	-	84	-	84
2097	27,678,654	4,330	4,330	-	60	-	60
2098	29,334,913	3,191	3,191	-	42	-	42
2099	31,091,721	2,299	2,299	-	28	-	28
2100	32,954,856	1,619	1,619	-	19	-	19
2101	34,930,480	1,112	1,112	-	12	-	12
2102	37,025,163	745	745	-	8	-	8
2103	39,245,905	485	485	-	5	-	5
2104	41,600,160	308	308	-	3	-	3
2105	44,095,852	190	190	-	2	-	2
2106	46,741,407	114	114	-	1	-	1
2107	49,545,774	66	66	-	1	-	1
2108	52,518,452	37	37	-	-	-	-
2109	55,669,521	20	20	-	-	-	-
2110	59,009,672	11	11	-	-	-	-
2111	62,550,241	6	6	-	-	-	-
2112	66,303,249	3	3	-	-	-	-
2113	70,281,441	2	2	-	-	-	-
2114	74,498,325	1	1	-	-	-	-
2115	78,968,223	-	-	-	-	-	-
2116	83,706,316	-	-	-	-	-	-
2117	88,728,695	-	-	-	-	-	-
2118	94,052,417	-	-	-	-	-	-

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

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2018	(34,161)	8.44	(4,048)	(4,048)	(4,048)	(1,777)	-	-	-	-	-	-
2019	-	8.44	-	-	-	-	-	-	-	-	-	-
2020	64,541	8.31	7,767	7,767	7,767	7,767	7,767	2,405	-	-	-	-
2021	-	8.31	-	-	-	-	-	-	-	-	-	-
2022	(88,903)	7.97	(11,155)	(11,155)	(11,155)	(11,155)	(11,155)	(11,155)	(10,818)	-	-	-
2023	-	7.97	-	-	-	-	-	-	-	-	-	-
Net Increa	Net Increase (Decrease) in OPEB Expense			(7,436)	(7,436)	(5,165)	(3,388)	(8,750)	(10,818)	-	-	-
Year	Changes of Assumptions	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2018	13,611	8.44	1,613	1,613	1,613	707	-	-	-	-	-	-
2019	24,398	8.44	2,891	2,891	2,891	2,891	1,270	-	-	-	-	-
2020	53,728	8.31	6,465	6,465	6,465	6,465	6,465	2,008	-	-	-	-
2021	(38,851)	8.31	(4,675)	(4,675)	(4,675)	(4,675)	(4,675)	(4,675)	(1,451)	-	-	-
2022	(8,217)	7.97	(1,031)	(1,031)	(1,031)	(1,031)	(1,031)	(1,031)	(1,000)	-	-	-
2023	24,653	7.97	3,093	3,093	3,093	3,093	3,093	3,093	3,093	3,002	-	-
Net Increa	se (Decrease) in OPEB Ex	pense	8,356	8,356	8,356	7,450	5,122	(605)	642	3,002	_	_

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)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2018	3,166	5	_									
				-	-	-	-	-	-	-	-	-
2019	2,199	5	439	-	-	-	-	-	-	-	-	-
2020	1,334	5	267	266	-	-	-	-	-	-	-	-
2021	(33,870)	5	(6,774)	(6,774)	(6,774)	-	-	-	-	-	-	-
2022	58,136	5	11,627	11,627	11,627	11,628	-	-	-	-	-	-
2023	(5,239)	5	(1,048)	(1,048)	(1,048)	(1,048)	(1,047)	-	-	-	-	-
Net Incr	ease (Decrease) in OPEB Ex	pense	4,511	4,071	3,805	10,580	(1,047)	-	-	-	-	-