



TOWN OF CHILMARK

Participant in the Dukes County Pooled OPEB Trust

OTHER POSTEMPLOYMENT BENEFITS PROGRAM

FINANCIAL REPORTING AND DISCLOSURES

Governmental Accounting Standards Board

Statements 74 and 75

**Disclosures as of
June 30, 2023**

KMS Actuarial, LLC
52 Hunt Road
Kingston, NH 03848

November, 2023



November 8, 2023

Ms. Dawn Barnes
Treasurer
Town of Chilmark
PO Box 119
Chilmark, MA 02535

Dear Dawn:

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 Chilmark, a Participant in the Dukes County Pooled OPEB Trust. 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, 2022 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 Town of Chilmark as well as health plan rates provided by the Trustees of the Dukes County Pooled OPEB Trust. 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 6.5%, 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 Dukes County Pooled OPEB Trust's investment policy statement and long-term expected rates of return by asset class obtained from recent surveys of capital market expectations and other reliable sources.

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 Dukes County 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 Town of Chilmark 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 Chilmark 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 Chilmark, other than as consulting actuary for this assignment, that would impair our independence.

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.

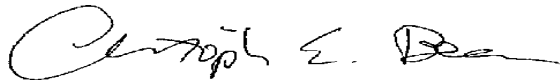
Respectfully submitted,



Linda L. Bournival, FSA, EA
Member, American Academy of Actuaries
(603) 792-9494



Amanda J. Makarevich, FSA
Member, American Academy of Actuaries
(603) 792-9494



Christopher E. Bean, ASA
Member, American Academy of Actuaries
(508) 628-9022

TABLE OF CONTENTS

EXECUTIVE SUMMARY		1
SECTION 1	PRINCIPAL VALUATION RESULTS	5
	Exhibit 1.1 - OPEB Trust Assets	
	Exhibit 1.2 - Total OPEB Liability	
	Exhibit 1.3 - Development of Actuarially Determined Employer Contributions	
SECTION 2	NOTES TO THE FINANCIAL STATEMENTS	8
	Exhibit 2.1 - Plan Description	
	Exhibit 2.2 - Net OPEB Liability	
SECTION 3	SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION	12
	Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios	
	Exhibit 3.2 - Investment Returns	
	Exhibit 3.3 - Schedule of Employer Contributions	
SECTION 4	EMPLOYER REPORTING AMOUNTS UNDER GASB 75	19
	Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources	
	Exhibit 4.2 - OPEB Expense	
SECTION 5	SUMMARY OF PLAN PROVISIONS	22
SECTION 6	ACTUARIAL ASSUMPTIONS AND METHODS	24
SECTION 7	PLAN MEMBER INFORMATION	30
	Exhibit 7.1 - Active Members by Age and Years of Service	
	Exhibit 7.2 - Retired Members, Covered Spouses and Survivors	
SECTION 8	GLOSSARY OF TERMS	32
SECTION 9	BREAKOUT OF RESULTS BY DEPARTMENT	35
Appendix A	CALCULATION OF SINGLE DISCOUNT RATE	
Appendix B	SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES and DEFERRED INFLOWS OF RESOURCES	

EXECUTIVE SUMMARY

Purpose of Report

This report presents the results of the actuarial valuation of the Town of Chilmark'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, 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 Town of Chilmark. 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 Chilmark.

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 Chilmark Other Postemployment Benefits Program

The Town of Chilmark 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 Cape Cod Municipal Health Group, 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:

Disclosure Date	June 30, 2023	June 30, 2022	% Change
Valuation Date	July 1, 2022	July 1, 2020	
Membership Data			
Active Plan Members	37	39	(5.1%)
Inactive Plan Members (excludes covered spouses)	21	18	16.7%
Total Plan Members	58	57	1.8%
Covered Spouses	9	6	50.0%
Covered Payroll	\$2,890,464	\$3,057,113	(5.5%)
Net OPEB Liability			
Discount Rate	6.50%	6.60%	
Total OPEB Liability (TOL)	\$6,499,786	\$6,520,101	(0.3%)
Fiduciary Net Position (FNP)	\$3,369,200	\$2,681,618	25.6%
Net OPEB Liability	\$3,130,586	\$3,838,483	(18.4%)
FNP as % of TOL	51.8%	41.1%	26.0%
OPEB Expense			
OPEB Expense	\$591,450	\$665,474	(11.1%)
Deferred Outflows	\$960,733	\$1,132,804	
Deferred Inflows	\$683,019	\$159,443	
Recognition Period	6.49	7.12	

EXECUTIVE SUMMARY

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, the difference between expected and actual experience resulted in an actuarial gain of approximately \$665,000. This gain is primarily attributable to:

- ◆ a gain due to lower than expected medical premiums since the prior valuation
- ◆ a gain due to fewer retirements and more terminations than expected
- ◆ a loss due to more new retirees covering spouses than expected

Changes of Assumptions

The discount rate changed from 6.6% as of June 30, 2022 to 6.5% as of June 30, 2023. In addition, many other assumptions were updated in this valuation, including the inflation rate, healthcare trend rates, and mortality improvement rates. 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	(10,000)
◆ Increase due to change in Trend Assumption	218,000
◆ Decrease due to change in Mortality Improvement Rates	(105,000)
◆ Increase due to change in Discount Rate	81,000
Total	\$ 184,000

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 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, 2023, is \$6,499,786. The Total OPEB Liability as of the prior measurement date, June 30, 2022, was \$6,520,101. During the current measurement period ending June 30, 2023, the Total OPEB Liability decreased by \$20,315, or -.3%. 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 \$3,369,200. The Fiduciary Net Position as of the prior measurement date, June 30, 2022, was \$2,681,618. During the plan years ended June 30, 2023 and June 30, 2022, the actual rates of return were 10.67% and -9.76%, respectively. The expected long-term rate of return is 6.50%. The Fiduciary Net Position is shown in Section 1, Exhibit 1.1.

EXECUTIVE SUMMARY

Employer Future Period Contributions

The Town's current funding policy is to annually contribute the Normal Cost based on the most recent actuarial study. Once the Town's pension liability is fully funded, contribute the Actuarially Determined Employer Contribution.

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 6.5%.

OPEB Expense

The OPEB Expense for the current measurement period ending June 30, 2023, is \$591,450. Benefit changes are recognized immediately, and experience gains and losses and assumption changes developed in this valuation are recognized over 6.49 years. Investment gains and losses are recognized over 5 years. The OPEB Expense for the prior measurement period was \$665,474. 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 Dukes County Pooled OPEB Trust has established an irrevocable trust pursuant to Chapter 149 of the Acts of 2010 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 Trustees and is presented below:

Fiscal Year Ended June 30	2023	2022
Trust Fund Composition at Fiscal Year-End		
Fixed Income	\$580,449	\$541,489
Cash & Equivalents	1,801	2,266
Large Cap Equity	1,226,251	882,763
Mid Cap Equity	331,699	241,983
Small Cap Equity	330,663	238,648
International Equity	501,391	360,142
Real Estate	396,946	414,327
Total Market Value of Assets	\$3,369,200	\$2,681,618
Asset Activity		
Market value, beginning of year	\$2,681,618	\$2,704,353
Employer Premiums	237,867	236,206
OPEB Trust Contributions	365,833	264,910
Benefit Payments	(237,867)	(236,206)
Administrative Expenses	-	-
Investment Return	321,749	(287,645)
Market value, end of year	\$3,369,200	\$2,681,618
Money-Weighted Rate of Return	10.67%	-9.76%
(Gain) / Loss on OPEB Plan Investments		
Projected earnings	\$199,060	\$194,471
Actual earnings	321,749	(287,645)
(Gain) / Loss on OPEB plan investments	(\$122,689)	\$482,116

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, 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, 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:	
a. Actives	\$3,483,154
b. Retirees, Covered Spouses and Survivors	3,036,947
c. Total OPEB Liability at 6.6% (a. + b.)	\$6,520,101
2. Service Cost	\$258,169
3. Expected Benefit Payments	
a. Current retirees	(\$204,683)
b. Future retirees	(33,184)
c. Total (a. + b.)	(\$237,867)
4. Interest [6.6% x (1.c. + 2. + .5 x 3.c)]	\$439,516
5. Changes of benefit terms	\$0
6. Differences between expected and actual experience	(\$664,945)
7. Changes of assumptions or other inputs	\$184,812
8. Total OPEB Liability, end of year (1.c. + 2. + 3.c. + 4. + 5. + 6. + 7.)	
a. Actives	\$2,849,051
b. Retirees, Covered Spouses and Survivors	3,650,735
c. Total OPEB Liability at 6.5% (a. + b.)	\$6,499,786

SECTION 1 - PRINCIPAL VALUATION RESULTS

Exhibit 1.3 - Development of Actuarially Determined Employer Contributions

The Town's current funding policy is to annually contribute the Normal Cost based on the most recent actuarial study. Once the Town's pension liability is fully funded, contribute the Actuarially Determined Employer Contribution.

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

Fiscal Year Ending	June 30, 2023	June 30, 2024
Discount Rate	6.60%	6.50%
1. Normal Cost	\$258,169	\$245,762
2. Unfunded Actuarial Accrued Liability		
a. Actuarial Accrued Liability	\$6,520,101	\$6,499,786
b. Actuarial Value of Plan Assets	\$2,681,618	\$3,369,200
c. Unfunded Actuarial Accrued Liability (a. - b.)	\$3,838,483	\$3,130,586
3. Amortization of Unfunded Actuarial Accrued Liability		
a. Unfunded Actuarial Accrued Liability	\$3,838,483	\$3,130,586
b. Amortization Period in years	30	30
c. Payroll Growth Rate	3.5%	3.5%
d. Amortization Factor	20.20	20.44
e. Amortization Amount (3.a. / 3.d.)	\$190,024	\$153,160
4. Interest on 1. and 3.e.	\$29,581	\$25,930
5. Actuarially Determined Employer Contribution (1. + 3.e. + 4.)	\$477,774	\$424,852
6. Actual Employer Contribution to OPEB Trust	\$365,833	TBD
7. Expected Benefit Payments	\$237,867	
8. Total Contribution (6. + 7.)	\$603,700	

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Exhibit 2.1 - Plan Description

Plan Administration

The Town of Chilmark 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, 2023, OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments ¹	21
Inactive plan members entitled to but not yet receiving benefit payments	0
Active plan members	37
	<u>58</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 Cape Cod Municipal Health Group, and the full cost of benefits is shared between the Town and retirees.

Employer Future Period Contributions

The Town's current funding policy is to annually contribute the Normal Cost based on the most recent actuarial study. Once the Town's pension liability is fully funded, contribute the Actuarially Determined Employer Contribution.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Exhibit 2.2 - Net OPEB Liability

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

Total OPEB liability	\$ 6,499,786
Fiduciary net position	(3,369,200)
Net OPEB liability	\$ 3,130,586

Fiduciary net position as a percentage of the total OPEB liability 51.84%

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 judgment.
Discount rate	6.5%, 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	RP-2014 Blue Collar Mortality Table, projected with generational mortality improvement using scale MP-2020.
Healthy Retiree Mortality	RP-2014 Blue Collar Mortality Table, projected with generational mortality improvement using scale MP-2020.
Disabled Retiree Mortality	RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2020.

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, 2023 are summarized in the following table:

Asset Class	Target Allocation ¹	Long-Term Expected Real Rates of Return ²
Large Cap Equity	35%	4.44%
Mid Cap Equity	10%	4.56%
Small Cap Equity	10%	4.56%
International Equity	15%	5.12%
Real Estate	10%	2.98%
Fixed Income	20%	1.93%
Total	100%	

¹ provided in the Dukes County Pooled OPEB Trust's investment policy statement.

² Obtained from recent surveys on capital market expectations and other reliable sources.

Discount Rate

The discount rate used to measure the total OPEB liability was 6.5%. 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 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.

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 6.5 percent, as well as what the net OPEB liability would be if it were calculated using a discount rate 1-percentage point lower (5.5 percent) or 1-percentage point higher (7.5 percent) than the current rate:

	1% Decrease (5.5%)	Assumed Discount Rate (6.5%)	1% Increase (7.5%)
Total OPEB Liability	\$ 7,406,207	\$ 6,499,786	\$ 5,756,046
Fiduciary Net Position	(3,369,200)	(3,369,200)	(3,369,200)
Net OPEB Liability	\$ 4,037,007	\$ 3,130,586	\$ 2,386,846
% Change in Net OPEB Liability	29.0%		-23.8%

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	\$ 5,642,794	\$ 6,499,786	\$ 7,562,615
Fiduciary Net Position	(3,369,200)	(3,369,200)	(3,369,200)
Net OPEB Liability	\$ 2,273,594	\$ 3,130,586	\$ 4,193,415
% Change in Net OPEB Liability	-27.4%		33.9%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios

Fiscal Year Ended June 30	2023	2022	2021	2020	2019
Total OPEB Liability					
Service cost	\$ 258,169	\$ 249,593	\$ 199,319	\$ 186,233	\$ 161,169
Interest	439,516	412,235	354,628	342,156	305,819
Changes of benefit terms	-	-	-	(167,222)	-
Differences between expected and actual experience	(664,945)	-	330,758	-	(286,633)
Changes of assumptions	184,812	(20,022)	457,095	322,145	479,951
Benefit payments	(237,867)	(236,206)	(188,186)	(196,555)	(205,184)
Net change in total OPEB liability	\$ (20,315)	\$ 405,600	\$ 1,153,614	\$ 486,757	\$ 455,122
Total OPEB liability—beginning	\$ 6,520,101	\$ 6,114,501	\$ 4,960,887	\$ 4,474,130	\$ 4,019,008
Total OPEB liability—ending (a)	\$ 6,499,786	\$ 6,520,101	\$ 6,114,501	\$ 4,960,887	\$ 4,474,130
Plan Fiduciary Net Position					
Contributions—employer	\$ 603,700	\$ 501,116	\$ 476,928	\$ 373,751	\$ 371,457
Net investment income	321,749	(287,645)	619,660	75,387	70,743
Benefit payments	(237,867)	(236,206)	(188,186)	(196,555)	(205,184)
Administrative expenses	-	-	-	-	-
Other	-	-	-	-	-
Net change in plan fiduciary net position	\$ 687,582	\$ (22,735)	\$ 908,402	\$ 252,583	\$ 237,016
Plan fiduciary net position—beginning	\$ 2,681,618	\$ 2,704,353	\$ 1,795,951	\$ 1,543,368	\$ 1,306,352
Plan fiduciary net position—ending (b)	\$ 3,369,200	\$ 2,681,618	\$ 2,704,353	\$ 1,795,951	\$ 1,543,368
Net OPEB liability—ending (a) – (b)	\$ 3,130,586	\$ 3,838,483	\$ 3,410,148	\$ 3,164,936	\$ 2,930,762
Plan fiduciary net position as a percentage of the total OPEB liability	51.84%	41.13%	44.23%	36.20%	34.50%
Covered payroll	\$ 2,890,464	\$ 3,057,113	\$ 2,861,018	\$ 2,583,371	\$ 2,438,644
Net OPEB liability as a percentage of covered payroll	108.31%	125.56%	119.19%	122.51%	120.18%
Discount Rate	6.50%	6.60%	6.60%	7.00%	7.50%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

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

Fiscal Year Ended June 30	2018	2017
Total OPEB Liability		
Service cost	\$ 155,117	\$ 149,151
Interest	288,425	270,822
Changes of benefit terms	(10,347)	-
Differences between expected and actual experience	-	-
Changes of assumptions	-	-
Benefit payments	(209,464)	(173,016)
Net change in total OPEB liability	\$ 223,731	\$ 246,957
Total OPEB liability—beginning	\$ 3,795,277	\$ 3,548,320
Total OPEB liability—ending (a)	\$ 4,019,008	\$ 3,795,277
Plan Fiduciary Net Position		
Contributions—employer	\$ 359,464	\$ 323,016
Net investment income	54,414	44,433
Benefit payments	(209,464)	(173,016)
Administrative expenses	-	-
Other	-	-
Net change in plan fiduciary net position	\$ 204,414	\$ 194,433
Plan fiduciary net position—beginning	\$ 1,101,938	\$ 907,505
Plan fiduciary net position—ending (b)	\$ 1,306,352	\$ 1,101,938
Net OPEB liability—ending (a) – (b)	\$ 2,712,656	\$ 2,693,339
Plan fiduciary net position as a percentage of the total OPEB liability	32.50%	29.03%
Covered payroll	\$ 2,326,953	\$ 1,990,712
Net OPEB liability as a percentage of covered payroll	116.58%	135.30%
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.

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 6.6% as of June 30, 2022 to 6.5% as of June 30, 2023. In addition, many other assumptions were updated in this valuation, including the inflation rate, healthcare trend rates, and mortality improvement rates.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

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 expenses	10.67%	-9.76%	30.40%	4.42%	5.02%	4.39%	4.25%			

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.

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, 2022	\$ 2,681,618	12	1.00	\$ 2,967,739
Monthly net external cash flows:				
July	365,833	11	0.92	401,460
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, 2023				\$ 3,369,200
Money-weighted rate of return:				10.67%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.3 - Schedule of Employer Contributions

Fiscal Year Ended June 30	2023	2022	2021	2020	2019
Actuarially determined contribution	\$ 477,774	\$ 446,027	\$ 388,736	\$ 372,740	\$ 332,955
Contributions in relation to the actuarially determined contribution	603,700	501,116	476,928	373,751	371,457
Contribution deficiency (excess)	<u>\$ (125,926)</u>	<u>\$ (55,089)</u>	<u>\$ (88,192)</u>	<u>\$ (1,011)</u>	<u>\$ (38,502)</u>
Covered payroll	\$ 2,890,464	\$ 3,057,113	\$ 2,861,018	\$ 2,583,371	\$ 2,438,644
Contributions as a percentage of covered payroll	20.89%	16.39%	16.67%	14.47%	15.23%
Discount rate	6.60%	6.60%	7.00%	7.50%	7.50%
Inflation	2.50%	2.40%	2.20%	2.40%	2.60%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.3 - Schedule of Employer Contributions, continued

Fiscal Year Ended June 30	2018	2017
Actuarially determined contribution	\$ 316,459	\$ 298,819
Contributions in relation to the actuarially determined contribution	<u>359,464</u>	<u>323,016</u>
Contribution deficiency (excess)	<u>\$ (43,005)</u>	<u>\$ (24,197)</u>
Covered payroll	\$ 2,326,953	\$ 1,990,712
Contributions as a percentage of covered payroll	15.45%	16.23%
Discount rate	7.50%	7.50%
Inflation	3.00%	3.00%

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	Increasing at 3.5% 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, 2023	
	Experience Losses	Experience Gains	Amounts Recognized in OPEB Expense through June 30, 2023	Deferred Outflows of Resources	Deferred Inflows of Resources	
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)	
2019	\$ -	\$ 286,633	\$ (180,500)	\$ -	\$ 106,133	
2020	-	-	-	-	-	
2021	330,758	-	139,365	191,393	-	
2022	-	-	-	-	-	
2023	-	664,945	(102,457)	-	562,488	
Total				<u>\$ 191,393</u>	<u>\$ 668,621</u>	

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, 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)	(b) + (c)	
2019	\$ 479,951	\$ -	\$ 302,235	\$ 177,716	\$ -	
2020	322,145	-	162,288	159,857	-	
2021	457,095	-	192,597	264,498	-	
2022	-	20,022	(5,624)	-	14,398	
2023	184,812	-	28,476	156,336	-	
Total				<u>\$ 758,407</u>	<u>\$ 14,398</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, 2023	
	Investment Earnings Less Than Projected	Investment Earnings Greater Than Projected	Amounts Recognized in OPEB Expense through June 30, 2023	Deferred Outflows of Resources	Deferred Inflows of Resources	
Year	(a)	(b)	(c)	(a) - (c)	(b) + (c)	
2019	\$ 35,019	\$ -	\$ 35,019	\$ -	\$ -	
2020	52,511	-	42,008	10,503	-	
2021	-	476,724	(286,035)	-	190,689	
2022	482,116	-	192,846	289,270	-	
2023	-	122,689	(24,538)	-	98,151	
Subtotal				\$ 299,773	\$ 288,840	
Net				\$ 10,933	\$ -	

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

Year ended June 30

2024	\$	85,823
2025	\$	75,321
2026	\$	169,208
2027	\$	47,465
2028	\$	(63,518)
Thereafter		(36,585)
Deferred Outflows	\$	960,733
Deferred Inflows	\$	683,019

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

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	\$ 258,169
2. Interest on the total OPEB liability	
a. Total OPEB liability, beginning of year	6,520,101
b. Service cost, beginning of year	258,169
c. Benefit payments	(237,867)
d. Interest on total OPEB liability = 6.6% times (a. + b. + .5 times c.)	439,516
3. Differences between expected and actual experience	(92,102)
4. Changes of benefit terms	-
5. Changes of assumptions	190,882
6. Projected earnings on OPEB plan investments	
a. Plan fiduciary net position, beginning of year	2,681,618
b. Contributions - Employer	603,700
c. Benefit payments	(237,867)
d. Administrative expenses and other	-
e. Total projected earnings	(199,060)
7. Differences between projected and actual earnings on OPEB plan investments	(5,955)
8. OPEB plan administrative expenses	-
9. Other changes in fiduciary net position	-
10. Total OPEB Expense	\$ 591,450

SECTION 5 - SUMMARY OF PLAN PROVISIONS

Eligibility for Postemployment Benefits Employees of the Town and their dependents are eligible for postemployment medical and life insurance based on the eligibility requirements under the Dukes County 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.

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
Blue Care Elect Preferred PPO	\$1,238.00	\$3,098.00
Network Blue NE HMO	\$947.00	\$2,541.00
Harvard Pilgrim PPO	\$1,022.00	\$2,703.00
Harvard Pilgrim HMO	\$931.00	\$2,491.00
Blue Care Elect Preferred PPO (PPO "Saver")	\$1,012.00	\$2,537.00
Master Health Plus	\$1,827.00	\$4,566.00
Network Blue NE HMO (HMO "Saver")	\$777.00	\$2,086.00
Harvard Pilgrim HSAQ PPO	\$794.00	\$2,134.00
Harvard Pilgrim HSAQ HMO	\$720.00	\$1,939.00

Medicare Plans - January 1, 2023	
BCBS Medex	\$380.00
HPHC Medicare Enhance	\$380.00
Tufts Medicare Supplement with PDP Plus	\$460.00
Medicare HMO Blue	\$410.03
Managed Blue for	\$377.64
Tufts Medicare Preferred HMO	\$371.00

SECTION 5 - SUMMARY OF PLAN PROVISIONS

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 Retirees are eligible for a \$5,000 life insurance benefit. The total monthly cost is \$4.10. Retirees contribute \$1.03 towards the monthly premiums.

SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

Valuation Date	July 1, 2022
Disclosure Date	June 30, 2023
GASB 75 Reporting Date	June 30, 2023
Long-Term Expected Rate of Return	<p>6.5%, net of investment expenses and including inflation at 2.5%. Previously, 6.6%.</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	3.65%, based on the Bond Buyer 20-Bond GO Index published on June 30, 2023.
Discount Rate (GASB)	<p>6.5%, compounded annually, for the measurement as of June 30, 2023.</p> <p>6.6%, compounded annually, for the measurement as of June 30, 2022.</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)	6.6%, compounded annually, for development of the Actuarially Determined Contribution (ADEC) as of June 30, 2023.
Amortization Method	Increasing at 3.5% 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%

Trend rates after year 5 grade down to the ultimate rate of 4.1 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.

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 - 85% of eligible retired employees will elect to participate.

Dental - Not offered to retired employees.

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.

60% 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	\$5,216	\$6,124	\$5,216	\$6,124
20-24	4,110	6,520	4,110	6,520
25-29	4,277	9,619	4,277	9,619
30-34	5,373	12,154	5,373	12,154
35-39	6,739	12,519	6,739	12,519
40-44	8,398	12,822	8,398	12,822
45-49	10,600	14,074	10,600	14,074
50-54	13,969	16,557	13,969	16,557
55-59	18,153	19,144	18,153	19,144
60-64	23,296	22,785	23,296	22,785
65-69	3,611	3,517	29,065	27,313
70-74	4,327	4,148	34,824	32,206
75-79	5,110	4,813	41,136	37,401
80-84	5,874	5,520	47,281	42,878
85-89	6,543	6,171	54,114	48,950
90-94	7,123	6,585	54,114	48,950
95+	7,571	6,369	54,114	48,950

Retiree Contributions

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

Plan	Contribution
Non-Medicare	\$ 3,985
Medicare	1,097

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 Town as of May 31, 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 Employees

Pre-Retirement Mortality

Pre-retirement mortality rates for General and Public Safety employees are based on the RP-2014 Blue Collar 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 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 Employees

Retirement Rates

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

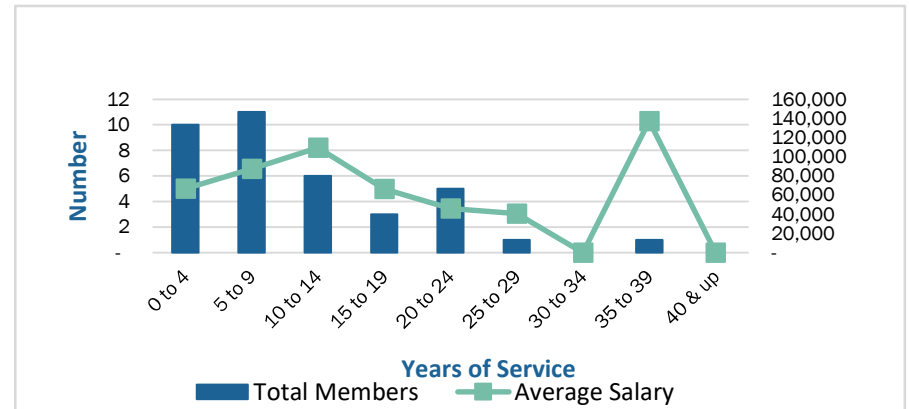
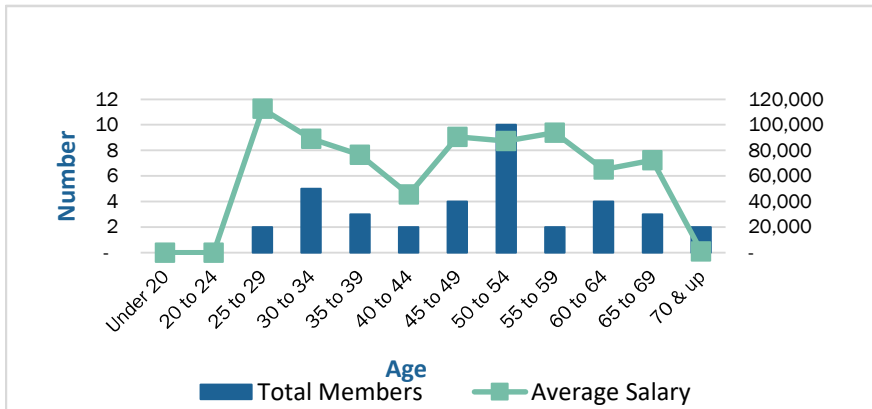
General Employees			Public Safety	
Age	Male	Female	Age	All
45	0.00%	0.00%	45	1.00%
50	1.00%	1.50%	50	2.00%
55	2.00%	5.50%	55	15.00%
60	12.00%	5.00%	60	20.00%
62	30.00%	15.00%	62	25.00%
65	40.00%	15.00%	65	100.00%
69	30.00%	20.00%		
70	100.00%	100.00%		

SECTION 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	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	1	1	-	-	-	-	-	-	-	2	224,936	112,468
30 to 34	1	4	-	-	-	-	-	-	-	5	445,231	89,046
35 to 39	1	1	1	-	-	-	-	-	-	3	229,486	76,495
40 to 44	2	-	-	-	-	-	-	-	-	2	91,072	45,536
45 to 49	-	1	2	-	1	-	-	-	-	4	361,705	90,426
50 to 54	3	2	2	1	2	-	-	-	-	10	872,037	87,204
55 to 59	-	1	-	-	-	-	-	1	-	2	187,533	93,766
60 to 64	2	-	1	-	-	1	-	-	-	4	259,988	64,997
65 to 69	-	-	-	2	1	-	-	-	-	3	216,478	72,159
70 & up	-	1	-	-	1	-	-	-	-	2	2,000	1,000
Total	10	11	6	3	5	1	-	1	-	37	2,890,464	78,121
Total Salary	667,921	959,223	656,003	199,279	230,525	40,466	-	137,046	-			
Average Salary	66,792	87,202	109,334	66,426	46,105	40,466	-	137,046	-			

Average Age: 49.5 Average Service: 10.6



SECTION 7 - PLAN MEMBER INFORMATION

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

Non-Medicare Plans						Medicare Plans		Total
Age	Blue Care Elect Preferred PPO	Network Blue NE HMO	Harvard Pilgrim PPO	Harvard Pilgrim HMO	Blue Care Elect Preferred PPO (PPO "Saver")	BCBS Medex	HPHC Medicare Enhance	
Under 40	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	0	0	0	0
50 to 54	0	0	0	0	0	0	0	0
55 to 59	1	0	0	0	0	0	0	1
60 to 64	1	0	0	0	0	1	0	2
65 to 69	1	0	0	0	0	4	0	5
70 to 74	0	0	0	0	0	6	1	7
75 to 79	0	0	0	0	0	5	0	5
80 to 84	0	0	0	0	0	0	0	0
85 to 89	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	1	0	1
Total	3	0	0	0	0	17	1	21
Covered Spouses	3	1	0	0	0	5	0	9

Average Age: 71.5

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 of Chilmark		Total
	Town of Chilmark	Tri-Town Ambulance	
Summary of Member Data Used in Valuation			
Active Members	29	8	37
Average Age	50.3	46.7	49.5
Average Service	10.8	9.6	10.6
Covered Payroll	2,224,087	666,377	2,890,464
Retired Members and Survivors	21	0	21
Average Age	71.5	-	71.5
Covered Spouses	9	0	9
Expected Benefit Payments	232,887	4,980	237,867
OPEB Trust contributions	292,666	73,167	365,833
Total Employer Contributions	525,553	78,147	603,700
Beginning Net OPEB Liability - June 30, 2022			
Total OPEB Liability	5,854,291	665,810	6,520,101
Fiduciary Net Position	2,428,367	253,251	2,681,618
Net OPEB Liability	3,425,924	412,559	3,838,483
Total OPEB Liability, beginning of year	5,854,291	665,810	6,520,101
Service cost	176,641	81,528	258,169
Interest	390,356	49,160	439,516
Changes of benefit terms	0	0	0
Differences between expected and actual experience	(556,902)	(108,043)	(664,945)
Changes of assumptions	174,316	10,496	184,812
Benefit payments	(232,887)	(4,980)	(237,867)
Net change in total OPEB liability	(48,476)	28,161	(20,315)
Total OPEB Liability, end of year	5,805,815	693,971	6,499,786
Ending Net OPEB Liability - June 30, 2023			
Total OPEB Liability	5,805,815	693,971	6,499,786
Fiduciary Net Position	3,008,634	360,566	3,369,200
Net OPEB Liability	2,797,181	333,405	3,130,586
Actuarially Determined Employer Contribution for FYE June 30, 2023			
Normal Cost	176,641	81,528	258,169
Amortization Payment	169,600	20,424	190,024
Interest	22,852	6,729	29,581
Actuarially Determined Employer Contribution	369,093	108,681	477,774
Actuarially Determined Employer Contribution for FYE June 30, 2024			
Normal Cost	169,676	76,086	245,762
Amortization Payment	136,849	16,311	153,160
Interest	19,924	6,006	25,930
Actuarially Determined Employer Contribution	326,449	98,403	424,852

SECTION 9 - BREAKOUT OF RESULTS BY DEPARTMENT

Department	Town of Chilmark		Total
	Town of Chilmark	Tri-Town Ambulance	
Total Deferred Outflows of Resources			
Differences between Expected and Actual Experience	171,849	19,544	191,393
Changes in Assumptions	680,961	77,446	758,407
Differences between Expected and Actual Earnings on OPEB Plan Investments	9,900	1,033	10,933
Total Deferred Outflows of Resources	862,710	98,023	960,733
Total Deferred Inflows of Resources			
Differences between Expected and Actual Experience	600,344	68,277	668,621
Changes in Assumptions	12,928	1,470	14,398
Differences between Expected and Actual Earnings on OPEB Plan Investments	0	0	0
Total Deferred Inflows of Resources	613,271	69,748	683,019
Total OPEB Expense	533,507	57,943	591,450
Sensitivity of the Net OPEB Liability to Changes in the Discount Rate			
Current Discount Rate: 6.5%	2,797,181	333,405	3,130,586
1% Decrease in the Discount Rate: 5.5%	3,606,825	430,182	4,037,007
1% Increase in the Discount Rate: 7.5%	2,132,849	253,997	2,386,846
Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates			
Current Trend Rates	2,797,181	333,405	3,130,586
1% Decrease in Trend Rates	2,031,689	241,905	2,273,594
1% Increase in Trend Rates	3,746,534	446,881	4,193,415
Deferred Outflows of Resources and Deferred Inflows of Resources recognized in OPEB Expense			
2024	77,085	8,738	85,823
2025	67,652	7,669	75,321
2026	151,980	17,228	169,208
2027	42,632	4,833	47,465
2028	(57,051)	(6,467)	(63,518)
Thereafter	(32,860)	(3,725)	(36,585)

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.

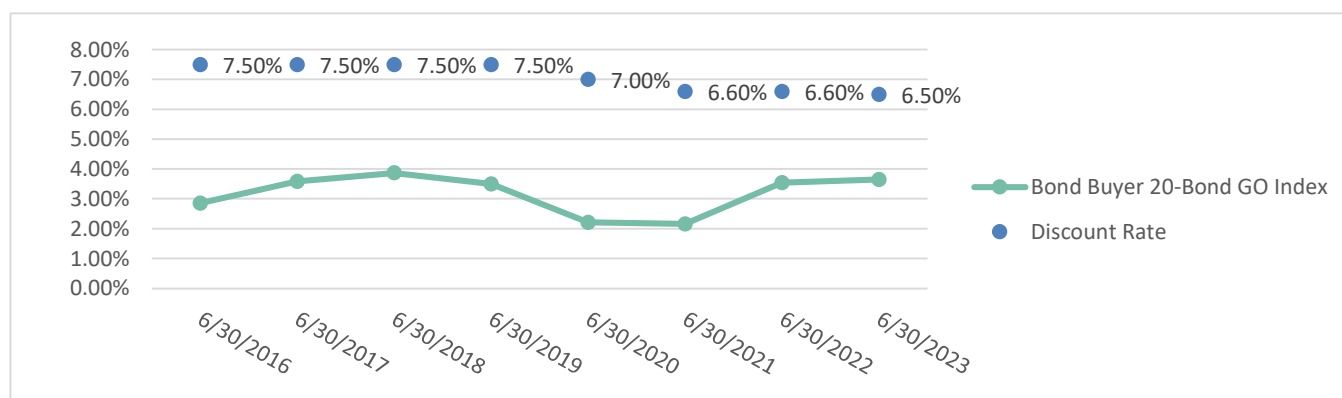
Projected cash flows into and out of the OPEB plan are assumed to be contributions to the OPEB plan, benefit payments, OPEB plan administrative expenses and OPEB plan investment earnings. These projected cash flows are used to project the OPEB plan's fiduciary net position at the beginning of each period. 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 6.5%, a long-term investment return rate of 6.5% 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 6.5%.

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 75:



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) * 8.09%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2023	2,936,272	-	2,936,272	237,867	365,833	-	603,700
2024	2,756,418	282,624	3,039,042	258,692	250,000	22,855	485,837
2025	2,630,775	514,633	3,145,408	301,426	250,000	41,617	509,809
2026	2,529,580	725,917	3,255,497	325,167	250,000	58,704	516,463
2027	2,381,726	987,713	3,369,439	347,478	250,000	79,875	517,603
2028	2,283,281	1,204,088	3,487,369	401,985	250,000	97,372	554,613
2029	2,194,406	1,415,021	3,609,427	438,601	250,000	114,430	574,171
2030	2,110,136	1,625,621	3,735,757	478,268	250,000	131,461	596,807
2031	2,039,501	1,827,007	3,866,508	534,761	250,000	147,747	637,014
2032	1,959,331	2,042,505	4,001,836	513,552	250,000	165,174	598,378
2033	1,850,446	2,291,454	4,141,900	543,951	250,000	185,306	608,645
2034	1,745,544	2,541,323	4,286,867	558,481	250,000	205,512	602,969
2035	1,643,055	2,793,852	4,436,907	582,246	250,000	225,934	606,312
2036	1,555,485	3,036,714	4,592,199	626,600	250,000	245,574	631,026
2037	1,470,997	3,281,929	4,752,926	611,450	250,000	265,404	596,046
2038	1,380,911	3,538,367	4,919,278	629,337	250,000	286,141	593,196
2039	1,300,966	3,790,487	5,091,453	611,947	250,000	306,530	555,417
2040	1,203,503	4,066,151	5,269,654	628,783	250,000	328,822	549,961
2041	1,141,443	4,312,649	5,454,092	632,255	250,000	348,756	533,499
2042	1,094,026	4,550,959	5,644,985	628,457	250,000	368,028	510,429
2043	1,039,234	4,803,325	5,842,559	657,654	250,000	388,436	519,218
2044	1,002,317	5,044,732	6,047,049	658,522	250,000	407,958	500,564
2045	948,422	5,310,274	6,258,696	702,296	250,000	429,432	522,864
2046	896,967	5,580,783	6,477,750	742,083	250,000	451,308	540,775
2047	853,796	5,850,675	6,704,471	760,454	250,000	473,133	537,321
2048	753,765	6,185,362	6,939,127	822,016	250,000	500,199	571,817
2049	691,484	6,490,512	7,181,996	860,290	250,000	524,876	585,414
2050	627,991	6,805,375	7,433,366	805,452	250,000	550,338	505,114
2051	552,906	7,140,628	7,693,534	842,712	250,000	577,450	515,262
2052	502,787	7,460,021	7,962,808	889,708	250,000	603,278	536,430
2053	434,650	7,806,856	8,241,506	723,226	250,000	631,326	341,900
2054	328,257	8,201,702	8,529,959	752,738	250,000	663,257	339,481
2055	283,798	8,544,710	8,828,508	780,967	250,000	690,995	339,972
2056	240,684	8,896,822	9,137,506	764,395	250,000	719,470	294,925

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) * 8.09%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2057	189,769	9,267,550	9,457,319	711,018	250,000	749,450	211,568
2058	126,915	9,661,410	9,788,325	727,265	250,000	781,301	195,964
2059	93,540	10,037,376	10,130,916	744,951	250,000	811,704	183,247
2060	71,197	10,414,301	10,485,498	674,427	250,000	842,186	82,241
2061	49,061	10,803,429	10,852,490	603,451	250,000	873,654	-
2062	7,514	11,224,813	11,232,327	601,348	250,000	907,730	-
2063	3,920	11,621,538	11,625,458	587,030	250,000	939,813	-
2064	2,765	12,029,584	12,032,349	519,602	250,000	972,811	-
2065	1,948	12,451,533	12,453,481	510,093	250,000	1,006,933	-
2066	-	12,889,353	12,889,353	499,115	250,000	1,042,339	-
2067	-	13,340,480	13,340,480	489,432	250,000	1,078,820	-
2068	-	13,807,397	13,807,397	485,895	250,000	1,116,579	-
2069	-	14,290,656	14,290,656	471,370	250,000	1,155,659	-
2070	-	14,790,829	14,790,829	462,868	250,000	1,196,108	-
2071	-	15,308,508	15,308,508	453,268	250,000	1,237,971	-
2072	-	15,844,306	15,844,306	442,272	250,000	1,281,300	-
2073	-	16,398,857	16,398,857	439,433	250,000	1,326,146	-
2074	-	16,972,817	16,972,817	424,919	250,000	1,372,561	-
2075	-	17,566,866	17,566,866	417,254	250,000	1,420,601	-
2076	-	18,181,706	18,181,706	407,580	250,000	1,470,322	-
2077	-	18,818,066	18,818,066	394,170	250,000	1,521,783	-
2078	-	19,476,698	19,476,698	384,836	250,000	1,575,045	-
2079	-	20,158,382	20,158,382	368,370	250,000	1,630,172	-
2080	-	20,863,925	20,863,925	355,296	250,000	1,687,228	-
2081	-	21,594,162	21,594,162	340,431	250,000	1,746,281	-
2082	-	22,349,958	22,349,958	322,035	250,000	1,807,401	-
2083	-	23,132,207	23,132,207	298,774	250,000	1,870,660	-
2084	-	23,941,834	23,941,834	278,755	250,000	1,936,133	-
2085	-	24,779,798	24,779,798	258,432	250,000	2,003,897	-
2086	-	25,647,091	25,647,091	237,463	250,000	2,074,034	-
2087	-	26,544,739	26,544,739	215,840	250,000	2,146,625	-
2088	-	27,473,805	27,473,805	192,799	250,000	2,221,757	-
2089	-	28,435,388	28,435,388	172,388	250,000	2,299,518	-
2090	-	29,430,627	29,430,627	150,029	250,000	2,380,002	-

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) * 8.09%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2091	-	30,460,699	30,460,699	131,460	250,000	2,463,302	-
2092	-	31,526,823	31,526,823	112,330	250,000	2,549,517	-
2093	-	32,630,262	32,630,262	94,684	250,000	2,638,750	-
2094	-	33,772,321	33,772,321	78,085	250,000	2,731,106	-
2095	-	34,954,352	34,954,352	64,187	250,000	2,826,695	-
2096	-	36,177,754	36,177,754	52,051	250,000	2,925,629	-
2097	-	37,443,975	37,443,975	41,598	250,000	3,028,026	-
2098	-	38,754,514	38,754,514	32,716	250,000	3,134,007	-
2099	-	40,110,922	40,110,922	25,290	250,000	3,243,698	-
2100	-	41,514,804	41,514,804	19,191	250,000	3,357,227	-
2101	-	42,967,822	42,967,822	14,278	250,000	3,474,730	-
2102	-	44,471,696	44,471,696	10,401	250,000	3,596,346	-
2103	-	46,028,205	46,028,205	7,408	250,000	3,722,218	-
2104	-	47,639,192	47,639,192	5,152	250,000	3,852,495	-
2105	-	49,306,564	49,306,564	3,493	250,000	3,987,333	-
2106	-	51,032,294	51,032,294	2,305	250,000	4,126,889	-
2107	-	52,818,424	52,818,424	1,479	250,000	4,271,330	-
2108	-	54,667,069	54,667,069	921	250,000	4,420,827	-
2109	-	56,580,416	56,580,416	557	250,000	4,575,556	-
2110	-	58,560,731	58,560,731	327	250,000	4,735,700	-
2111	-	60,610,357	60,610,357	186	250,000	4,901,450	-
2112	-	62,731,719	62,731,719	102	250,000	5,073,001	-
2113	-	64,927,329	64,927,329	54	250,000	5,250,556	-
2114	-	67,199,786	67,199,786	29	250,000	5,434,325	-
2115	-	69,551,779	69,551,779	15	250,000	5,624,526	-
2116	-	71,986,091	71,986,091	7	250,000	5,821,385	-
2117	-	74,505,604	74,505,604	4	250,000	6,025,133	-
2118	-	77,113,300	77,113,300	2	250,000	6,236,013	-
2119	-	79,812,266	79,812,266	1	250,000	6,454,273	-
2120	-	82,605,695	82,605,695	-	250,000	6,680,173	-

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)
2023	2,681,618	603,700	237,867	-	321,749	3,369,200
2024	3,369,200	485,837	258,692	-	226,380	3,822,725
2025	3,822,725	509,809	301,426	-	255,250	4,286,358
2026	4,286,358	516,463	325,167	-	284,830	4,762,484
2027	4,762,484	517,603	347,478	-	315,091	5,247,700
2028	5,247,700	554,613	401,985	-	346,061	5,746,389
2029	5,746,389	574,171	438,601	-	377,921	6,259,880
2030	6,259,880	596,807	478,268	-	410,745	6,789,164
2031	6,789,164	637,014	534,761	-	444,619	7,336,036
2032	7,336,036	598,378	513,552	-	479,599	7,900,461
2033	7,900,461	608,645	543,951	-	515,633	8,480,788
2034	8,480,788	602,969	558,481	-	552,697	9,077,973
2035	9,077,973	606,312	582,246	-	590,850	9,692,889
2036	9,692,889	631,026	626,600	-	630,182	10,327,497
2037	10,327,497	596,046	611,450	-	670,787	10,982,880
2038	10,982,880	593,196	629,337	-	712,713	11,659,452
2039	11,659,452	555,417	611,947	-	756,027	12,358,949
2040	12,358,949	549,961	628,783	-	800,770	13,080,897
2041	13,080,897	533,499	632,255	-	847,049	13,829,190
2042	13,829,190	510,429	628,457	-	895,061	14,606,223
2043	14,606,223	519,218	657,654	-	944,905	15,412,692
2044	15,412,692	500,564	658,522	-	996,691	16,251,425
2045	16,251,425	522,864	702,296	-	1,050,511	17,122,504
2046	17,122,504	540,775	742,083	-	1,106,420	18,027,616
2047	18,027,616	537,321	760,454	-	1,164,543	18,969,026
2048	18,969,026	571,817	822,016	-	1,224,855	19,943,682
2049	19,943,682	585,414	860,290	-	1,287,406	20,956,212
2050	20,956,212	505,114	805,452	-	1,352,393	22,008,267
2051	22,008,267	515,262	842,712	-	1,419,895	23,100,712
2052	23,100,712	536,430	889,708	-	1,490,065	24,237,499
2053	24,237,499	341,900	723,226	-	1,563,044	25,419,217
2054	25,419,217	339,481	752,738	-	1,638,818	26,644,778
2055	26,644,778	339,972	780,967	-	1,717,578	27,921,361
2056	27,921,361	294,925	764,395	-	1,799,631	29,251,522

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)
2057	29,251,522	211,568	711,018	-	1,885,117	30,637,189
2058	30,637,189	195,964	727,265	-	1,974,150	32,080,038
2059	32,080,038	183,247	744,951	-	2,066,947	33,585,281
2060	33,585,281	82,241	674,427	-	2,163,797	35,156,892
2061	35,156,892	-	603,451	-	2,265,586	36,819,027
2062	36,819,027	-	601,348	-	2,373,693	38,591,372
2063	38,591,372	-	587,030	-	2,489,361	40,493,703
2064	40,493,703	-	519,602	-	2,615,204	42,589,305
2065	42,589,305	-	510,093	-	2,751,727	44,830,939
2066	44,830,939	-	499,115	-	2,897,790	47,229,614
2067	47,229,614	-	489,432	-	3,054,018	49,794,200
2068	49,794,200	-	485,895	-	3,220,831	52,529,136
2069	52,529,136	-	471,370	-	3,399,074	55,456,840
2070	55,456,840	-	462,868	-	3,589,651	58,583,623
2071	58,583,623	-	453,268	-	3,793,204	61,923,559
2072	61,923,559	-	442,272	-	4,010,657	65,491,944
2073	65,491,944	-	439,433	-	4,242,695	69,295,206
2074	69,295,206	-	424,919	-	4,490,379	73,360,666
2075	73,360,666	-	417,254	-	4,754,883	77,698,295
2076	77,698,295	-	407,580	-	5,037,143	82,327,858
2077	82,327,858	-	394,170	-	5,338,500	87,272,188
2078	87,272,188	-	384,836	-	5,660,185	92,547,537
2079	92,547,537	-	368,370	-	6,003,618	98,182,785
2080	98,182,785	-	355,296	-	6,370,334	104,197,823
2081	104,197,823	-	340,431	-	6,761,794	110,619,186
2082	110,619,186	-	322,035	-	7,179,781	117,476,932
2083	117,476,932	-	298,774	-	7,626,290	124,804,448
2084	124,804,448	-	278,755	-	8,103,230	132,628,923
2085	132,628,923	-	258,432	-	8,612,481	140,982,972
2086	140,982,972	-	237,463	-	9,156,176	149,901,685
2087	149,901,685	-	215,840	-	9,736,595	159,422,440
2088	159,422,440	-	192,799	-	10,356,193	169,585,834
2089	169,585,834	-	172,388	-	11,017,477	180,430,923
2090	180,430,923	-	150,029	-	11,723,134	192,004,028

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)
2091	192,004,028	-	131,460	-	12,475,989	204,348,557
2092	204,348,557	-	112,330	-	13,279,005	217,515,232
2093	217,515,232	-	94,684	-	14,135,413	231,555,961
2094	231,555,961	-	78,085	-	15,048,600	246,526,476
2095	246,526,476	-	64,187	-	16,022,135	262,484,424
2096	262,484,424	-	52,051	-	17,059,796	279,492,169
2097	279,492,169	-	41,598	-	18,165,639	297,616,210
2098	297,616,210	-	32,716	-	19,343,990	316,927,484
2099	316,927,484	-	25,290	-	20,599,465	337,501,659
2100	337,501,659	-	19,191	-	21,936,984	359,419,452
2101	359,419,452	-	14,278	-	23,361,800	382,766,974
2102	382,766,974	-	10,401	-	24,879,515	407,636,088
2103	407,636,088	-	7,408	-	26,496,105	434,124,785
2104	434,124,785	-	5,152	-	28,217,944	462,337,577
2105	462,337,577	-	3,493	-	30,051,829	492,385,913
2106	492,385,913	-	2,305	-	32,005,009	524,388,617
2107	524,388,617	-	1,479	-	34,085,212	558,472,350
2108	558,472,350	-	921	-	36,300,673	594,772,102
2109	594,772,102	-	557	-	38,660,169	633,431,714
2110	633,431,714	-	327	-	41,173,051	674,604,438
2111	674,604,438	-	186	-	43,849,282	718,453,534
2112	718,453,534	-	102	-	46,699,476	765,152,908
2113	765,152,908	-	54	-	49,734,937	814,887,791
2114	814,887,791	-	29	-	52,967,705	867,855,467
2115	867,855,467	-	15	-	56,410,605	924,266,057
2116	924,266,057	-	7	-	60,077,293	984,343,343
2117	984,343,343	-	4	-	63,982,317	1,048,325,656
2118	1,048,325,656	-	2	-	68,141,168	1,116,466,822
2119	1,116,466,822	-	1	-	72,570,343	1,189,037,164
2120	1,189,037,164	-	-	-	77,287,416	1,266,324,580

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

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

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) = 6.5%
2024	3,369,200	258,692	258,692	-	250,673	-	250,673
2025	3,822,725	301,426	301,426	-	274,256	-	274,256
2026	4,286,358	325,167	325,167	-	277,800	-	277,800
2027	4,762,484	347,478	347,478	-	278,743	-	278,743
2028	5,247,700	401,985	401,985	-	302,787	-	302,787
2029	5,746,389	438,601	438,601	-	310,204	-	310,204
2030	6,259,880	478,268	478,268	-	317,613	-	317,613
2031	6,789,164	534,761	534,761	-	333,455	-	333,455
2032	7,336,036	513,552	513,552	-	300,686	-	300,686
2033	7,900,461	543,951	543,951	-	299,046	-	299,046
2034	8,480,788	558,481	558,481	-	288,295	-	288,295
2035	9,077,973	582,246	582,246	-	282,219	-	282,219
2036	9,692,889	626,600	626,600	-	285,181	-	285,181
2037	10,327,497	611,450	611,450	-	261,301	-	261,301
2038	10,982,880	629,337	629,337	-	252,531	-	252,531
2039	11,659,452	611,947	611,947	-	230,566	-	230,566
2040	12,358,949	628,783	628,783	-	222,450	-	222,450
2041	13,080,897	632,255	632,255	-	210,027	-	210,027
2042	13,829,190	628,457	628,457	-	196,023	-	196,023
2043	14,606,223	657,654	657,654	-	192,611	-	192,611
2044	15,412,692	658,522	658,522	-	181,094	-	181,094
2045	16,251,425	702,296	702,296	-	181,344	-	181,344
2046	17,122,504	742,083	742,083	-	179,923	-	179,923
2047	18,027,616	760,454	760,454	-	173,124	-	173,124
2048	18,969,026	822,016	822,016	-	175,717	-	175,717
2049	19,943,682	860,290	860,290	-	172,675	-	172,675
2050	20,956,212	805,452	805,452	-	151,801	-	151,801
2051	22,008,267	842,712	842,712	-	149,130	-	149,130
2052	23,100,712	889,708	889,708	-	147,837	-	147,837
2053	24,237,499	723,226	723,226	-	112,839	-	112,839
2054	25,419,217	752,738	752,738	-	110,276	-	110,276
2055	26,644,778	780,967	780,967	-	107,429	-	107,429

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

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

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) = 6.5%
2056	27,921,361	764,395	764,395	-	98,731	-	98,731
2057	29,251,522	711,018	711,018	-	86,232	-	86,232
2058	30,637,189	727,265	727,265	-	82,819	-	82,819
2059	32,080,038	744,951	744,951	-	79,656	-	79,656
2060	33,585,281	674,427	674,427	-	67,713	-	67,713
2061	35,156,892	603,451	603,451	-	56,889	-	56,889
2062	36,819,027	601,348	601,348	-	53,231	-	53,231
2063	38,591,372	587,030	587,030	-	48,792	-	48,792
2064	40,493,703	519,602	519,602	-	40,552	-	40,552
2065	42,589,305	510,093	510,093	-	37,380	-	37,380
2066	44,830,939	499,115	499,115	-	34,343	-	34,343
2067	47,229,614	489,432	489,432	-	31,622	-	31,622
2068	49,794,200	485,895	485,895	-	29,477	-	29,477
2069	52,529,136	471,370	471,370	-	26,851	-	26,851
2070	55,456,840	462,868	462,868	-	24,757	-	24,757
2071	58,583,623	453,268	453,268	-	22,764	-	22,764
2072	61,923,559	442,272	442,272	-	20,856	-	20,856
2073	65,491,944	439,433	439,433	-	19,458	-	19,458
2074	69,295,206	424,919	424,919	-	17,667	-	17,667
2075	73,360,666	417,254	417,254	-	16,289	-	16,289
2076	77,698,295	407,580	407,580	-	14,940	-	14,940
2077	82,327,858	394,170	394,170	-	13,567	-	13,567
2078	87,272,188	384,836	384,836	-	12,437	-	12,437
2079	92,547,537	368,370	368,370	-	11,178	-	11,178
2080	98,182,785	355,296	355,296	-	10,124	-	10,124
2081	104,197,823	340,431	340,431	-	9,108	-	9,108
2082	110,619,186	322,035	322,035	-	8,090	-	8,090
2083	117,476,932	298,774	298,774	-	7,048	-	7,048
2084	124,804,448	278,755	278,755	-	6,174	-	6,174
2085	132,628,923	258,432	258,432	-	5,375	-	5,375
2086	140,982,972	237,463	237,463	-	4,637	-	4,637
2087	149,901,685	215,840	215,840	-	3,958	-	3,958

APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

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

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) = 6.5%
2088	159,422,440	192,799	192,799	-	3,319	-	3,319
2089	169,585,834	172,388	172,388	-	2,787	-	2,787
2090	180,430,923	150,029	150,029	-	2,277	-	2,277
2091	192,004,028	131,460	131,460	-	1,874	-	1,874
2092	204,348,557	112,330	112,330	-	1,503	-	1,503
2093	217,515,232	94,684	94,684	-	1,190	-	1,190
2094	231,555,961	78,085	78,085	-	921	-	921
2095	246,526,476	64,187	64,187	-	711	-	711
2096	262,484,424	52,051	52,051	-	541	-	541
2097	279,492,169	41,598	41,598	-	406	-	406
2098	297,616,210	32,716	32,716	-	300	-	300
2099	316,927,484	25,290	25,290	-	218	-	218
2100	337,501,659	19,191	19,191	-	155	-	155
2101	359,419,452	14,278	14,278	-	108	-	108
2102	382,766,974	10,401	10,401	-	74	-	74
2103	407,636,088	7,408	7,408	-	50	-	50
2104	434,124,785	5,152	5,152	-	32	-	32
2105	462,337,577	3,493	3,493	-	21	-	21
2106	492,385,913	2,305	2,305	-	13	-	13
2107	524,388,617	1,479	1,479	-	8	-	8
2108	558,472,350	921	921	-	5	-	5
2109	594,772,102	557	557	-	3	-	3
2110	633,431,714	327	327	-	1	-	1
2111	674,604,438	186	186	-	1	-	1
2112	718,453,534	102	102	-	-	-	-
2113	765,152,908	54	54	-	-	-	-
2114	814,887,791	29	29	-	-	-	-
2115	867,855,467	15	15	-	-	-	-
2116	924,266,057	7	7	-	-	-	-
2117	984,343,343	4	4	-	-	-	-
2118	1,048,325,656	2	2	-	-	-	-
2119	1,116,466,822	1	1	-	-	-	-
2120	1,189,037,164	-	-	-	-	-	-

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
2019	(286,633)	7.94	(36,100)	(36,100)	(36,100)	(33,933)	-	-	-	-	-	-
2020	-	7.94	-	-	-	-	-	-	-	-	-	-
2021	330,758	7.12	46,455	46,455	46,455	46,455	46,455	5,573	-	-	-	-
2022	-	7.12	-	-	-	-	-	-	-	-	-	-
2023	(664,945)	6.49	(102,457)	(102,457)	(102,457)	(102,457)	(102,457)	(102,457)	(50,203)	-	-	-
Net Increase (Decrease) in OPEB Expense			(92,102)	(92,102)	(92,102)	(89,935)	(56,002)	(96,884)	(50,203)	-	-	-

Year	Changes of Assumptions	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2019	479,951	7.94	60,447	60,447	60,447	56,822	-	-	-	-	-	-
2020	322,145	7.94	40,572	40,572	40,572	40,572	38,141	-	-	-	-	-
2021	457,095	7.12	64,199	64,199	64,199	64,199	64,199	7,702	-	-	-	-
2022	(20,022)	7.12	(2,812)	(2,812)	(2,812)	(2,812)	(2,812)	(2,812)	(338)	-	-	-
2023	184,812	6.49	28,476	28,476	28,476	28,476	28,476	28,476	13,956	-	-	-
Net Increase (Decrease) in OPEB Expense			190,882	190,882	190,882	187,257	128,004	33,366	13,618	-	-	-

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
2019	35,019	5	7,003	-	-	-	-	-	-	-	-	-
2020	52,511	5	10,502	10,503	-	-	-	-	-	-	-	-
2021	(476,724)	5	(95,345)	(95,345)	(95,344)	-	-	-	-	-	-	-
2022	482,116	5	96,423	96,423	96,423	96,424	-	-	-	-	-	-
2023	(122,689)	5	(24,538)	(24,538)	(24,538)	(24,538)	(24,537)	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			(5,955)	(12,957)	(23,459)	71,886	(24,537)	-	-	-	-	-