



The Town of Middletown Postretirement Benefits Plan

Actuarial Valuation Report
for Fiscal Year Ending
June 30, 2022

Governmental Accounting Standards Board
Statements No. 74 & 75

April 14, 2023



April 14, 2023

Mr. Marc W. Tanguay
Finance Director
Town Hall
Town of Middletown
350 East Main Road
Middletown, Rhode Island 02842

GASB 74 & 75 Actuarial Valuation of the Town of Middletown's Postretirement Benefits Plan (the "Plan") for Fiscal Year Ending June 30, 2022

Dear Marc:

Buck was retained by the Town of Middletown ("Middletown") to complete this actuarial valuation report which provides information for Middletown's Postretirement Benefits Plan (the "Plan") for the fiscal year ending June 30, 2022. The purposes of the valuation are to measure the fiduciary net position of the Plan, to measure the accounting amounts required for the costs to maintain the Plan for Middletown and to provide reporting and disclosure information for financial statements of the Plan and of Middletown, as well as for governmental agencies and other interested parties. This valuation report contains information that is required for compliance with the Governmental Accounting Standards Board's Statement 74, Financial Reporting for Postemployment Benefit Plans Other than Pension Plans ("GASB 74") and Statement 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions ("GASB 75").

Purpose of This Report

Middletown may use this report as a source of information for its financial statements and for the recommended Actuarially Determined Contribution ("ADC"). Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. This report should not be provided except in its entirety.

Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statements made without its prior review.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, changes in assumptions, changes expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period), and changes in plan provisions or applicable law. In particular, retiree group benefit models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in

these approximations and estimates may lead to significant changes in actuarial measurements. An analysis of the potential range of such future differences other than the required disclosures related to the sensitivity to discount rate and healthcare cost trend rate assumptions is beyond the scope of this report.

Data, Assumptions, Methods and Plan Provisions

This valuation was performed using employee census data and plan provisions provided by Middletown personnel as of June 30, 2022. The participant data provided contained detailed census data for all active employees and retirees participating in the Middletown Postretirement Benefits Plan as of June 30, 2022. Although we did not audit the data, we reviewed the data for reasonableness and consistency with information provided for prior valuations. A detailed review of the data and its sources beyond that necessary to develop the analysis was not performed and is beyond the scope of the analysis. The results of the valuation are dependent on the accuracy of the data.

The entry age normal liabilities presented herein were determined as of June 30, 2022 using data as of that date provided by Middletown.

The assumptions, methods, and plan provisions used were the same as those described in the Middletown Postretirement Benefits Plan GASB 74 & 75 Valuation Report as of June 30, 2021 dated December 10, 2021, except for the following:

- The per capita cost assumptions were updated to reflect premiums effective July 1, 2022. This decreased the liability.
- Healthcare cost trend was updated to reflect recent healthcare trend survey results, while also considering the current high-inflationary environment. The FYE 2023 Pre-Medicare trend was increased from 6.75% to 7.50%. This rate is assumed to decrease by 25 basis points per year until an ultimate rate of 4.50% is reached in FYE 2035. The FYE 2023 Post-Medicare and Part B trend was increased from 5.50% to 6.00%. This rate is assumed to decrease by 25 basis points per year until FYE 2025, and then by 10 basis points per year until an ultimate rate of 4.50% is reached in FYE 2035. The updates to the healthcare cost trend led to an increase in the liability.
- The mortality improvement scale was updated to scale MP-2021 to reflect a more recent improvement scale published by the Society of Actuaries (SOA). This increased the liability.
- The Municipal Bond 20-year Index Rate was updated from 2.18% to 4.09% based on the S&P Municipal Bond 20 Year High Grade Rate Index as of June 30, 2022. This had no impact on liabilities given that the discount rate used in the calculation of liabilities is the long term expected rate of return of the plan's assets (see Appendix A for more details).
- The participation assumption for Fire actives and Police actives hired on or after July 1, 2018 was updated to be 100% and 90%, respectively. This increased the liability.
- The actuarial cost method used in determining the actuarially determined contribution was updated from the Projected Unit Credit method to the Entry Age Normal Level Percent of Salary method.

The impact of health care reform under the Affordable Care Act ("ACA") has been evaluated and reflected in determining the liabilities and costs for the Plan. Please see Appendix E for a discussion of Health Care Reform (HCR) related provisions.

While the potential impact of the COVID-19 pandemic was considered, no explicit adjustments were made to the results to reflect the impact of this pandemic. We will continue to monitor the emerging experience and consider any impact of the virus in future measurements of the plan's liabilities.

Use of Models

Actuarial Standard of Practice No. 56 (“ASOP 56”) requires actuaries to disclose information when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. In performing this assignment, we used the following model:

ProVal

- Intended purpose: Value the health liabilities, GASB expense, and projected pay-as-you-go costs
- Material inconsistencies, unreasonable output, limitations or weaknesses: None known
- Reliance: Buck relied on the model, which was developed by actuaries at Winklevoss Technologies. We reviewed the model for reasonability before using it.

Key Results

Middletown’s total OPEB liability of \$26,885,440 was calculated as of June 30, 2022 reflecting valuation results as of that date. The total OPEB liability of \$26,798,439 as of June 30, 2021 was based on a no gain/loss roll forward of valuation results as of June 30, 2020. The total OPEB liability increased from June 30, 2021 to June 30, 2022 primarily due to expected increases due to the passage of time, the updated health care cost trend and the updated participation assumptions. These changes were mostly offset by favorable per capita claims cost assumptions.

The ADC is increasing from \$869,388 for the fiscal year ending June 30, 2022, to \$1,155,724 for the fiscal year ending June 30, 2023. This increase is primarily attributable to the higher unfunded actuarial accrued liability driven by a lower than expected actuarial value of assets.

Actuarial Certification

The assumptions used for financial accounting purposes were selected by the plan sponsor with our advice. In our opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are reasonably related to the experience of the Plan and to reasonable long-term expectations. The cost results and actuarial exhibits presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures. To the best of our knowledge, the information fairly presents the actuarial position of Middletown’s Postretirement Benefits Plan in accordance with the requirements of GASB Statements No. 74 and 75 as of June 30, 2022.

It is important to note that the measurement of postretirement medical obligations is extremely sensitive to the assumptions chosen. The results presented above and in more detail in the next sections are based upon one set of reasonable assumptions. Other sets of equally reasonable assumptions can yield materially lesser or greater obligations.

This report represents a statement of actuarial opinion by the undersigned actuaries. The report was prepared under the supervision of Kevin Penderghest and the assumptions were set under the supervision of Prakash Sankaran. Kevin Penderghest is an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries. Prakash Sankaran is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. Both Kevin and Prakash have met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained

Mr. Marc Tanguay
Middletown

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herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice and they are available to answer questions about these results.

Sincerely,



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GASB 74 & 75 Information

Method Used to Value Investments

Investments are reported at market value.

Plan Administration

Middletown administers the Plan, a single-employer defined benefit postretirement benefits plan. The Plan covers eligible retirees and disabled employees of the Middletown Town and Schools, as well as their spouses and survivors. Middletown officially set up an OPEB trust fund in June 2011 through its trustee, Citizens Bank. The trust fund is segregated and dedicated to providing OPEB benefits.

Plan Membership

Membership Status as of June 30, 2022	Count
Inactive plan members or beneficiaries currently receiving benefits	220
Inactive plan members entitled to but not yet receiving benefits	0
Active plan members	<u>354</u>
Total Participants	574

Net OPEB Liability

Components of the Net OPEB Liability	
Total OPEB Liability	\$ 26,885,440
Plan Fiduciary Net Position	<u>19,829,670</u>
Net OPEB Liability	\$ 7,055,770
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	73.76%

Actuarial Assumptions

Please see Appendix A of this report for a description of the actuarial assumptions.

Benefits Provided

Please see Appendix B of this report for a summary of the plan provisions.

Funded Status and Contributions

In recent years, Middletown has contributed at least the actuarially determined contribution ("ADC"). For the fiscal year ending June 30, 2022, Middletown contributed \$2,656,963 (net of retiree contributions). For purposes of this analysis, we have assumed Middletown will contribute the ADC for fiscal years ending 2023 and after.

The plan is funded by Middletown contributions and some current retiree contributions. Current retiree contributions are described in Appendix B.

Rate of Return

For the fiscal year ending June 30, 2022, the annual money-weighted rate of return on investments, net of investment expense, was (15.00%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount Rate

As part of our valuation work, we projected benefit payouts and the fiduciary net position of the plan for as long as benefits were expected to be paid to current active and inactive plan participants and their dependents. The amounts were compared for each year in the projection period. For each future period, the plan fiduciary net position is projected to be greater than the benefits to be made in that period. Thus, the valuation discount rate used in these calculations is the long term expected rate of return of the plan's assets.

Schedule of Required Supplementary Information

The following schedule outlines the required information pertaining to the Total OPEB Liability, the Plan Fiduciary Net Position and the Net OPEB Liability for the fiscal years ending June 30, 2021 and June 30, 2022:

Schedule of Changes in Net OPEB Liability and Related Ratios	FYE 2022	FYE 2021
Total OPEB Liability		
Service Cost	\$ 387,782	\$ 391,768
Interest	1,979,152	2,056,345
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	15,170	(415,551)
Changes of Assumptions	(670,676)	(1,458,153)
Benefit Payments	(1,624,427)	(1,575,772)
Net Change in Total OPEB Liability	\$ 87,001	\$ (1,001,363)
Total OPEB Liability at Beginning of Year	\$ 26,798,439	\$ 27,799,802
Total OPEB Liability at End of Year (a)	\$ 26,885,440	\$ 26,798,439
Plan Fiduciary Net Position		
Contributions - Employer	\$ 2,656,962	\$ 4,010,476
Contributions - Employees	29,265	25,674
Net Investment Income	(3,415,818)	4,452,204
Benefit Payments	(1,624,427)	(1,575,772)
Administrative Expenses	(20,403)	(24,830)
Other	-	-
Net Change in Plan Fiduciary Net Position	\$ (2,374,421)	\$ 6,887,752
Plan Fiduciary Net Position Beginning of Year	\$ 22,204,091	\$ 15,316,339
Plan Fiduciary Net Position End of Year (b)	\$ 19,829,670	\$ 22,204,091
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	73.76%	82.86%
Net OPEB Liability End of Year ((a) - (b))	\$ 7,055,770	\$ 4,594,348
Covered Employee Payroll	\$ 27,521,237	\$ 26,443,469
Net OPEB Liability as a Percentage of Covered Employee Payroll	25.64%	17.37%

The below table outlines the components of the total OPEB expense for the fiscal years ending June 30, 2021 and June 30, 2022:

Components of OPEB Expense	FYE 2022	FYE 2021
Service Cost	\$ 387,782	\$ 391,768
Interest on the Total OPEB Liability and Net Cash Flow	1,979,152	2,056,345
Projected Earnings on OPEB Plan Investments	(1,703,653)	(1,238,407)
Current Period Effect of Benefit Changes	-	-
Current Period Difference Between Expected and Actual Experience	1,653	(44,828)
Current Period Effect of Changes in Assumptions	(73,058)	(157,298)
Current Period Difference Between Projected and Actual Investment Earnings	1,023,894	(642,759)
Member Contributions	(29,265)	(25,674)
Administrative Expenses	20,403	24,830
Current Period Recognition of Prior Years' Deferred Outflows of Resources	244,710	244,709
Current Period Recognition of Prior Years' Deferred Inflows of Resources	(1,810,268)	(965,383)
Total OPEB Expense	\$ 41,350	\$ (356,697)

The following tables depict the sensitivity of the Net OPEB Liability due to changes in both the discount rate and the healthcare cost trend rate which are required under GASB No. 75.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate	1% Decrease	Current Discount Rate	1% Increase
Net OPEB Liability	\$ 9,964,914	\$ 7,055,770	\$ 4,591,420

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate	1% Decrease	Current Trend Rate	1% Increase
Net OPEB Liability	\$ 4,377,378	\$ 7,055,770	\$ 10,298,487

The following table outlines the employer contributions for the fiscal years ending June 30, 2022 and the five prior fiscal years. The actual contributions were provided by Middletown.

Schedule of Employer Contributions	FYE 2022	FYE 2021	FYE 2020	FYE 2019	FYE 2018	FYE 2017
Actuarially Determined Contribution	\$ 869,388	\$ 1,505,947	\$ 1,971,037	\$ 2,011,938	\$ 2,415,706	\$ 2,174,483
Contributions Related to the Actuarially Determined Contribution	<u>2,656,962</u>	<u>4,010,476</u>	<u>4,418,603</u>	<u>3,610,377</u>	<u>3,550,098</u>	<u>2,846,481</u>
Contribution Deficiency (Excess)	\$ (1,787,574)	\$ (2,504,529)	\$ (2,447,566)	\$ (1,598,439)	\$ (1,134,392)	\$ (671,998)
Covered Employee Payroll	\$ 27,521,237	\$ 26,443,469	\$ 29,376,747	\$ 24,564,252	\$ 25,008,014	\$ 22,684,805
Contribution as a Percentage of Covered Employee Payroll	9.65%	15.17%	15.04%	14.70%	14.20%	12.55%

Deferred Inflows and Outflows for the Fiscal Year Ending June 30, 2022

Following are the details of the recognized and deferred outflows and inflows of resources.

The amounts due to changes in assumptions and differences between expected and actual experience are amortized over the average expected service of the covered population as of the measurement date, which is assumed to be the same at the beginning of the reporting period.

Amortization of Difference Between Expected and Actual Experience

Fiscal Year Ending	2018	2019	2020	2021	2022	Outflows	Inflows	Total
Amount established	\$ (3,021,201)	\$ (312,797)	\$ 122,554	\$ (415,551)	\$ 15,170			
Recognition Period	7.34	7.34	9.27	9.27	9.18			
Amount recognized in FY								
2018	\$ (411,608)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (411,608)	\$ (411,608)
2019	(411,608)	(42,615)	-	-	-	-	(454,223)	(454,223)
2020	(411,608)	(42,615)	13,220	-	-	13,220	(454,223)	(441,003)
2021	(411,608)	(42,615)	13,220	(44,828)	-	13,220	(499,051)	(485,831)
2022	(411,608)	(42,615)	13,220	(44,828)	1,653	14,873	(499,051)	(484,178)
2023	(411,608)	(42,615)	13,220	(44,828)	1,653	14,873	(499,051)	(484,178)
2024	(411,608)	(42,615)	13,220	(44,828)	1,653	14,873	(499,051)	(484,178)
2025	(139,945)	(42,615)	13,220	(44,828)	1,653	14,873	(227,388)	(212,515)
2026	-	(14,492)	13,220	(44,828)	1,653	14,873	(59,320)	(44,447)
2027	-	-	13,220	(44,828)	1,653	14,873	(44,828)	(29,955)
2028	-	-	13,220	(44,828)	1,653	14,873	(44,828)	(29,955)
2029	-	-	3,574	(44,828)	1,653	5,227	(44,828)	(39,601)
2030	-	-	-	(12,099)	1,653	1,653	(12,099)	(10,446)
2031	-	-	-	-	293	293	-	293
Deferred Balance at 6/30								
2018	\$ (2,609,593)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,609,593)	\$ (2,609,593)
2019	(2,197,985)	(270,182)	-	-	-	-	(2,468,167)	(2,468,167)
2020	(1,786,377)	(227,567)	109,334	-	-	109,334	(2,013,944)	(1,904,610)
2021	(1,374,769)	(184,952)	96,114	(370,723)	-	96,114	(1,930,444)	(1,834,330)
2022	(963,161)	(142,337)	82,894	(325,895)	13,517	96,411	(1,431,393)	(1,334,982)
2023	(551,553)	(99,722)	69,674	(281,067)	11,864	81,538	(932,342)	(850,804)
2024	(139,945)	(57,107)	56,454	(236,239)	10,211	66,665	(433,291)	(366,626)
2025	-	(14,492)	43,234	(191,411)	8,558	51,792	(205,903)	(154,111)
2026	-	-	30,014	(146,583)	6,905	36,919	(146,583)	(109,664)
2027	-	-	16,794	(101,755)	5,252	22,046	(101,755)	(79,709)
2028	-	-	3,574	(56,927)	3,599	7,173	(56,927)	(49,754)
2029	-	-	-	(12,099)	1,946	1,946	(12,099)	(10,153)
2030	-	-	-	-	293	293	-	293
2031	-	-	-	-	-	-	-	-

Amortization of Changes in Assumptions

Fiscal Year Ending	2018	2019	2020	2021	2022	Outflows	Inflows	Total
Amount established	\$ (2,007,827)	\$ 68,486	\$ (2,202,682)	\$ (1,458,153)	\$ (670,676)			
Recognition Period	7.34	7.34	9.27	9.27	9.18			
Amount recognized in FY								
2018	\$ (273,546)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (273,546)	\$ (273,546)
2019	(273,546)	9,331	-	-	-	9,331	(273,546)	(264,215)
2020	(273,546)	9,331	(237,614)	-	-	9,331	(511,160)	(501,829)
2021	(273,546)	9,331	(237,614)	(157,298)	-	9,331	(668,458)	(659,127)
2022	(273,546)	9,331	(237,614)	(157,298)	(73,058)	9,331	(741,516)	(732,185)
2023	(273,546)	9,331	(237,614)	(157,298)	(73,058)	9,331	(741,516)	(732,185)
2024	(273,546)	9,331	(237,614)	(157,298)	(73,058)	9,331	(741,516)	(732,185)
2025	(93,005)	9,331	(237,614)	(157,298)	(73,058)	9,331	(560,975)	(551,644)
2026	-	3,169	(237,614)	(157,298)	(73,058)	3,169	(467,970)	(464,801)
2027	-	-	(237,614)	(157,298)	(73,058)	-	(467,970)	(467,970)
2028	-	-	(237,614)	(157,298)	(73,058)	-	(467,970)	(467,970)
2029	-	-	(64,156)	(157,298)	(73,058)	-	(294,512)	(294,512)
2030	-	-	-	(42,471)	(73,058)	-	(115,529)	(115,529)
2031	-	-	-	-	(13,154)	-	(13,154)	(13,154)
Deferred Balance at 6/30								
2018	\$ (1,734,281)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,734,281)	\$ (1,734,281)
2019	(1,460,735)	59,155	-	-	-	59,155	(1,460,735)	(1,401,580)
2020	(1,187,189)	49,824	(1,965,068)	-	-	49,824	(3,152,257)	(3,102,433)
2021	(913,643)	40,493	(1,727,454)	(1,300,855)	-	40,493	(3,941,952)	(3,901,459)
2022	(640,097)	31,162	(1,489,840)	(1,143,557)	(597,618)	31,162	(3,871,112)	(3,839,950)
2023	(366,551)	21,831	(1,252,226)	(986,259)	(524,560)	21,831	(3,129,596)	(3,107,765)
2024	(93,005)	12,500	(1,014,612)	(828,961)	(451,502)	12,500	(2,388,080)	(2,375,580)
2025	-	3,169	(776,998)	(671,663)	(378,444)	3,169	(1,827,105)	(1,823,936)
2026	-	-	(539,384)	(514,365)	(305,386)	-	(1,359,135)	(1,359,135)
2027	-	-	(301,770)	(357,067)	(232,328)	-	(891,165)	(891,165)
2028	-	-	(64,156)	(199,769)	(159,270)	-	(423,195)	(423,195)
2029	-	-	-	(42,471)	(86,212)	-	(128,683)	(128,683)
2030	-	-	-	-	(13,154)	-	(13,154)	(13,154)
2031	-	-	-	-	-	-	-	-

Amortization of Difference Between Projected and Actual Investment Earnings

Fiscal Year Ending	2018	2019	2020	2021	2022	Outflows	Inflows	Total
Amount established	\$ 99,361	\$ 274,362	\$ 737,069	\$ (3,213,797)	\$ 5,119,471			
Recognition Period	5.0	5.0	5.00	5.00	5.00			
Amount recognized in FY								
2018	\$ 19,872	\$ -	\$ -	\$ -	\$ -	\$ 19,872	\$ -	\$ 19,872
2019	19,872	54,872	-	-	-	74,744	-	74,744
2020	19,872	54,872	147,414	-	-	222,158	-	222,158
2021	19,872	54,872	147,414	(642,759)	-	222,158	(642,759)	(420,601)
2022	19,873	54,872	147,414	(642,759)	1,023,894	1,246,053	(642,759)	603,294
2023	-	54,874	147,414	(642,759)	1,023,894	1,226,182	(642,759)	583,423
2024	-	-	147,413	(642,759)	1,023,894	1,171,307	(642,759)	528,548
2025	-	-	-	(642,761)	1,023,894	1,023,894	(642,761)	381,133
2026	-	-	-	-	1,023,895	1,023,895	-	1,023,895
Deferred Balance at 6/30								
2018	\$ 79,489	\$ -	\$ -	\$ -	\$ -	\$ 79,489	\$ -	\$ 79,489
2019	59,617	219,490	-	-	-	279,107	-	279,107
2020	39,745	164,618	589,655	-	-	794,018	-	794,018
2021	19,873	109,746	442,241	(2,571,038)	-	571,860	(2,571,038)	(1,999,178)
2022	-	54,874	294,827	(1,928,279)	4,095,577	4,445,278	(1,928,279)	2,516,999
2023	-	-	147,413	(1,285,520)	3,071,683	3,219,096	(1,285,520)	1,933,576
2024	-	-	-	(642,761)	2,047,789	2,047,789	(642,761)	1,405,028
2025	-	-	-	-	1,023,895	1,023,895	-	1,023,895
2026	-	-	-	-	-	-	-	-

Following is a summary of the schedule of deferred outflows and inflows of resources.

Future Years' Recognition of Deferred Outflows/Inflows			
Fiscal year	Deferred Outflows	Deferred Inflows	Total
2023	1,250,386	(1,883,326)	(632,940)
2024	1,195,511	(1,883,326)	(687,815)
2025	1,048,098	(1,431,124)	(383,026)
2026	1,041,937	(527,290)	514,647
2027	14,873	(512,798)	(497,925)
2028	14,873	(512,798)	(497,925)
2029	5,227	(339,340)	(334,113)
2030	1,653	(127,628)	(125,975)
2031	293	(13,154)	(12,861)
2032	0	0	0

Funding Analysis (ADC Determination) for FYE 2023

Funding Results Comparison*

The below table outlines the components for determining the Actuarially Determined Contribution (ADC) for the fiscal years ending June 30, 2022 and June 30, 2023. The actuarial cost method used in determining the actuarially determined contribution was updated from the Projected Unit Credit method to the Entry Age Normal Level Percent of Salary method for the fiscal year ending June 30, 2023. The assumptions and methods used for determining the ADC are consistent with those used for the GASB 74 & 75 valuation.

Actuarially Determined Contribution	FYE 2023	FYE 2022
a) Actuarial Value of Assets	\$ 19,829,670	\$ 22,204,091
b) Actuarial Accrued Liability "AAL"		
Active Participants	9,236,113	8,879,386
Retired Participants	17,649,327	18,264,986
Total AAL	\$ 26,885,440	\$ 27,144,373
c) Unfunded Actuarial Accrued Liability "UAAL" [b - a]	7,055,770	4,940,282
d) Funded ratio [a / b]	73.76%	81.80%
e) Annual covered payroll	27,521,237	26,443,469
f) UAAL as percentage of covered payroll	25.64%	18.68%
g) Normal Cost for fiscal year beginning on measurement date (with interest)	485,108	448,846
h) Amortization of UAAL for fiscal year beginning on measurement date	623,829	391,202
i) Interest to end of fiscal year	46,787	29,340
j) Actuarially Determined Contribution ("ADC")*		
for fiscal year beginning on measurement date [g + h + i]	\$ 1,155,724	\$ 869,388
k) Expected benefit payments for fiscal year beginning on measurement date	\$ 1,901,825	\$ 1,897,723

Splits by Department

The below table outlines results presented above split by town department.

Number of Employees	Fire	Police	Public Works	Town Hall	Clerical & Custodial	Teachers & Administration	Total
Actives	38	38	15	31	38	194	354
Retirees and Spouses	77	89	1	2	4	47	220
Total	115	127	16	33	42	241	574

June 30, 2022 Actuarially Accrued Liability @ 7.5%	Fire	Police	Public Works	Town Hall	Clerical & Custodial	Teachers & Administration	Total
Actives	\$ 2,492,633	\$ 2,761,788	\$ 106,164	\$ 151,700	\$ 255,728	\$ 3,468,100	\$ 9,236,113
Retirees and Spouses	10,441,591	6,141,117	2,709	69,227	87,579	907,104	17,649,327
Total	\$ 12,934,224	\$ 8,902,905	\$ 108,873	\$ 220,927	\$ 343,307	\$ 4,375,204	\$ 26,885,440
Plan Assets	\$ 9,539,788	\$ 6,566,441	\$ 80,301	\$ 162,947	\$ 253,210	\$ 3,226,983	\$ 19,829,670
Unfunded Actuarially Accrued Liability (UAAL)	\$ 3,394,436	\$ 2,336,464	\$ 28,572	\$ 57,980	\$ 90,097	\$ 1,148,221	\$ 7,055,770

FYE 2023 Actuarially Determined Contribution @ 7.5%	Fire	Police	Public Works	Town Hall	Clerical & Custodial	Teachers & Administration	Total
Normal Cost	\$ 198,061	\$ 176,827	\$ 3,099	\$ 3,924	\$ 12,655	\$ 90,542	\$ 485,108
Amortization of UAAL	300,115	206,577	2,526	5,126	7,966	101,519	623,829
Interest	22,509	15,494	189	384	597	7,614	46,787
Total	\$ 520,685	\$ 398,898	\$ 5,814	\$ 9,434	\$ 21,218	\$ 199,675	\$ 1,155,724
Expected Pay-as-you-go Costs	\$ 909,811	\$ 633,750	\$ 1,050	\$ 19,138	\$ 60,346	\$ 277,730	\$ 1,901,825

Appendix A: Actuarial Assumptions and Methods

Actuarial Methods

Valuation Date

June 30, 2022.

Measurement Date

June 30, 2022.

Actuarial Cost Method

GASB 74 & 75: Entry Age Normal, Level Percent of Salary. Service Costs are attributed through all assumed ages of exit from active service.

Actuarially Determined Contribution: Entry Age Normal, Level Percent of Salary. Service Costs are attributed through all assumed ages of exit from active service. The actuarial cost method has been updated since the prior valuation.

Asset Valuation

Market Value.

Funding Method

In the past, Middletown has made contributions based on the ADC, contributing at least the ADC in recent years.

The ADC is equal to the sum of the normal cost plus an amortization of the Unfunded Actuarial Accrued Liability (UAAL). The amortization period used in calculating the ADC was established effective July 1, 2007, reflecting a 30-year period and an amortization payment that increases by 3.0% per year, consistent with the 3.0% payroll growth rate. As of July 1, 2022, there are 15 years remaining in the amortization period, which was reflected in the ADC calculated for fiscal year ending June 30, 2023.

Unless otherwise specified, the funding valuation relies upon the same assumptions as are used in the GASB 74 & 75 valuations.

Miscellaneous

The valuation was prepared on an on-going plan basis. This assumption does not necessarily imply that an obligation to continue the plan actually exists.

Economic Assumptions

Discount Rate

7.50% per year, net of investment expenses; based on a projection of Middletown's future benefit payments compared to its fiduciary net position. Based on Middletown's current funding policy, Middletown is expected to cover the projected benefit payments through the projection period so the long-term asset rate of return can be used as the interest rate under GASB 74 & 75.

Long Term Expected Rate of Return

7.50% per annum, net of investment expenses and including inflation.

Municipal Bond 20-year Index Rate

4.09% for the measurement date of June 30, 2022, which is based on the S&P Municipal Bond 20-Year High Grade Rate Index as of June 30, 2022. The rate used for the previous measurement date of June 30, 2021 is 2.18%, which is based on the S&P Municipal Bond 20-Year High Grade Rate Index as of June 30, 2021.

Future Salary Increases

Compensation was assumed to increase at 3%. This is consistent with the rate used for the valuation of Middletown's pension plan.

Benefit Related Assumptions

Assumed Trend

The combined effect of price inflation and utilization on gross eligible medical and prescription drug charges is according to the table below. The initial trend rate was developed using Buck’s National Health Care Trend Survey and has been updated since the prior valuation based on recent healthcare trend survey results, while also considering the current high-inflationary environment. The survey gathers information of trend expectations for the coming year from various insurers and pharmacy benefit managers. These trends are broken out by drug and medical, as well as type of coverage (e.g. PPO, HMO, POS). We selected plans that most closely match Middletown’s benefits to set the initial trend. The ultimate trend is developed based on a building block approach which considers CPI, GDP, and technology growth. The healthcare cost trend rates are shown below:

FYE	Pre-Medicare	Post-Medicare / Part B
2023	7.50%	6.00%
2024	7.25%	5.75%
2025	7.00%	5.50%
2026	6.75%	5.40%
2027	6.50%	5.30%
2028	6.25%	5.20%
2029	6.00%	5.10%
2030	5.75%	5.00%
2031	5.50%	4.90%
2032	5.25%	4.80%
2033	5.00%	4.70%
2034	4.75%	4.60%
2035+	4.50%	4.50%

Dental costs are assumed to increase by 4.00% each year.

Retiree contribution trend: Same as medical trend.

Individual Initial Premium Thresholds (i.e., the caps) are assumed to continue to grow by 2.00% each year.

Rebates are assumed to remain flat.

Health Care Claim Cost

We understand that Middletown accesses health benefits through the Rhode Island Interlocal Risk Management Trust. However, we assumed that the provided rates represent the experience of Middletown’s population. For valuation purposes, the cost of coverage for non-Medicare plans with pre-65 participants was based on the stated premium for individual coverage adjusted for the age of the participant, based on the actual age distribution of pre-65 active employees and retirees with medical coverage. For non-Medicare plans that have post-65 participants, the stated premium was age adjusted

for the age of the participant based on the actual age distribution of all active employees and retirees with medical coverage. The cost of coverage for Medicare plans was based on the stated premium adjusted for the age of the participant, based on the actual age distribution of post-65 active employees and retirees with medical coverage.

The age adjustments were made using the Age Related Morbidity discussed later in this section. Age Related Morbidity is not applied to dental rates.

Spouses are assumed to cost the same as a retiree with the same age and sex.

Employee cost sharing is based on current individual and family rates.

Dental Plan Costs

Dental plan costs are based on the provided individual premium. The premium is assumed to be self-supporting, with costs that do not vary by age.

Spouses are assumed to cost the same as the retiree.

Medicare Part B Premium

The premium amount for calendar year 2023 is \$164.90 per month. We trended it backwards 6 months to adjust it to reflect fiscal year ending 2023. This is the Medicare Part B premium in effect for most Medicare beneficiaries in 2023¹.

Child Coverage

Dependent children are assumed to be covered for as long as the spouse is covered and under age 65. The cost for dependent children is assumed to be 20% of the cost of the spouse.

Employee Contributions

Fire employees' contributions to the trust are not directly reflected in the valuation. The Actuarial Determined Contribution amount is assumed to reflect overall contribution amounts for the fiscal year, with Middletown's required Normal Cost contribution to be directly reduced by any contributions made by the employees.

Plan Election

Retirees are assumed to remain in their chosen plan for the duration of their coverage or until age 65. For those groups that are eligible to receive coverage upon turning 65, we assume the retiree will be eligible for Medicare and elect the post-65 plans noted in the Plan Provisions.

For future Fire and Police retirees, we assumed 100% would participate in the HSA plan, which is reasonable based on current retiree elections and guidance from Town personnel.

¹ Other Medicare beneficiaries who will pay a different Medicare Part B premium include those impacted by the hold harmless provision and those who have taxable income of \$97,000 or more (\$194,000 or more if filing jointly with spouse).

Administrative Expenses

It is our understanding that all administrative costs are reflected in the premiums provided.

Age Related Morbidity

Per capita costs are adjusted to reflect expected cost differences due to age and gender. Age morbidity factors for pre-Medicare morbidity were developed from "Health Care Costs—From Birth to Death" sponsored by the Society of Actuaries and prepared by Dale H. Yamamoto (May 2013)¹. Table 4 from Mr. Yamamoto's study formed the basis of Medicare morbidity factors that are gender distinct and assumed a cost allocation of 60% for pharmacy, 20% for inpatient, 10% for outpatient, and 10% for professional services. Adjustments were made to Table 4 factors for inpatient costs at age 70 and below to smooth out what appears to be a spike in utilization for Medicare retirees gaining healthcare for the first time through Medicare. While such retirees were included in the study, their specific experience is not applicable for a valuation of an employer retiree medical plan where participants had group active coverage before retirement. Morbidity factors at sample ages are shown below:

Age	Male	Female
50	0.4602	0.5723
55	0.6038	0.6667
60	0.7779	0.7776
65	1.0000	0.9107
70	1.0894	1.0178
75	1.1700	1.1024
80	1.2283	1.1652
85	1.2372	1.2087
90	1.2143	1.2208

Morbidity is not applied to dental rates.

¹ <https://www.soa.org/resources/research-reports/2013/research-health-care-birth-death/>

Demographic Assumptions

Participation Rates

Future retirees eligible for subsidized retiree coverage are assumed to elect medical (and dental, if applicable) coverage at retirement at the following percentages.

Group	Rate
Fire	100%
Police	Varies ²
Public Works	80%
Town Hall	80%
Clerical	90%
Custodial	90%
Teachers ¹	90%
Administration ¹	90%

¹ The remaining 10% of Teachers and Administration are assumed to elect the \$2,500 buyback option.

² The participation rate for Police is 100% for those hired on or before July 1, 2018. 90% of those hired after July 1, 2018 are assumed to participate, as they are required to contribute to retiree medical benefits.

The participation assumptions for Police and Fire have been updated since the prior valuation. The various participation assumptions described above were derived using actuarial judgment based on observations of participation patterns for contribution levels over a variety of plans.

Marital Status

80% of employees are assumed to have a covered spouse at retirement, except as noted. Teachers and Administrators are not assumed to cover their spouses as retirees must pay 100% of the stated premium for dependent coverage. Wives are assumed to be three years younger than their husbands. These assumptions were developed using actuarial judgment based on observations of dependent coverage over a variety of plans.

Mortality Rates

The mortality rates assumed for Fire and Police are as follows.

- PubS.H-2010 Headcount Weighted Public Safety Mortality, projected with mortality improvement scale MP-2021.

The mortality rates for Public Works, Town Hall, Clerical and Custodial are as follows.

- PubG.H-2010 Headcount Weighted General Mortality, projected with mortality improvement scale MP-2021.

The mortality rates assumed for Teachers and Administration are as follows.

- PubT.H-2010 Headcount Weighted Teachers Mortality, projected with mortality improvement scale MP-2021.

The mortality rates assumed for disabled members are as follows.

- Fire and Police: PubS.H-2010 Headcount Weighted Safety Disabled Mortality, projected with mortality improvement scale MP-2021.
- All other groups: PubT/G.H-2010 Headcount Weighted Teachers/General Disabled Mortality, projected with mortality improvement scale MP-2021.

These rates are consistent with the SOA study on public pension plan mortality published in January 2019 and the updated mortality improvement scale published in October 2021.

Withdrawal Rates

All employees are assumed to withdraw from active service based on the MERS General Employees' rate tables published in the 2019 ERSRI Experience Study.

Disability Rates

All employees are assumed to become disabled from active service based on the MERS General Employees' rate tables published in the 2019 ERSRI Experience Study.

Retirement Rates

The retirement rates assumed for Public Works, Town Hall, Clerical and Custodial are as follows.

- Employees are assumed to retire at a flat rate of 20% each year once eligible for an unreduced ERSRI pension benefit as determined by the earlier of (a) 65 & 30, (b) 64 & 31, (c) 63 & 32, (d) 62 & 33, or (e) the employee's RIRSA date.
- The 20% becomes 25% in the first year of eligibility if eligibility for an unreduced pension benefit occurs at age 65 or at 25 years of service.
- In some cases, the first eligibility date was furnished by ERSRI. In other cases, the RIRSA date was calculated by Buck based on the employee's RIRSA retirement schedule (1-4 for General employees). Employees who are Middletown pension plan participants are also assumed to follow the same decrement schedule as outlined in the 2015 Pension Settlement Agreement; the RIRSA date for these employees was calculated by Buck for the purpose of assigning retirement decrement rates consistent with the Town pension plan.
- Retirement rates are assumed to apply when the employee becomes eligible for both retiree medical coverage and for an unreduced pension. Otherwise, withdrawal rates are assumed to apply.

The retirement rates assumed for Police and Fire are as follows.

- Employees participating in the state pension plans are assumed to retire, become disabled, or withdraw from active service based on the MERS Police & Fire rate tables published in the 2019 ERSRI Experience Study.
- Retirement rates are assumed to apply when the employee becomes eligible for both retiree medical coverage and for an unreduced pension. Otherwise, withdrawal rates are assumed to apply.

The retirement rates assumed for Teachers and Administration are as follows.

- Employees are assumed to retire at a flat rate of 20% each year once eligible for an unreduced ERSRI pension benefit as determined by the earlier of (a) 65 & 30, (b) 64 & 31, (c) 63 & 32, (d) 62 & 33, or (e) the employee's RIRSA date, under the age of 67, and a flat rate of 35% if over age 67.
- The 20% or 35% becomes 30% in the first year of eligibility if eligibility for an unreduced pension benefit occurs at age 65 or at 25 years of service.

- In some cases, the first eligibility date was furnished by ERSRI. In other cases, the RIRSA date was calculated by Buck based on the employee's RIRSA retirement schedule (1-4 for General employees).
- Retirement rates are assumed to apply when the employee becomes eligible for both retiree medical coverage and for an unreduced pension. Otherwise, withdrawal rates are assumed to apply.

Appendix B: Summary of Plan Provisions

Eligibility

The retirement eligibility criteria for retiree health benefits are shown in the following table. Note: The below eligibility criteria apply to most active employees. *Certain active employees are subject to different eligibility criteria; we did not consider such special cases in this valuation.*

Group	Criteria	Retirement Eligibility
Fire	Hired after 7/1/2004	Service = 20
Fire	Hired after 7/1/2011	Age = 57 and Service = 30
Police	Hired before 7/1/2015	Service = 20
Police	Hired on/after 7/1/2015	Age = 50 and Service = 25
Public Works	n/a	Age = 60 and Service = 10, or Service = 30
Town Hall/Fire Civilian	n/a	Service = 25
School Clerical	n/a	Service = 15
School Custodial	n/a	Service = 15
Teachers	n/a	Age = 55 and Service = 15
Administration	n/a	Age = 55 and Service = 15

Additionally, an employee is eligible for retiree health benefits if he/she becomes disabled after attaining 10 years of service.

Medical Benefits

Subsidized medical benefits offered to current and future retirees, including the benefit term, are shown in the following table. We did not include benefits in which the retiree and/or spouse is required to fully cover the cost of coverage. Note: Certain individuals are subject to different benefit terms; we did not consider such special cases in this valuation.

Group	Criteria	Retiree Medical	Spouse Medical ²
Fire	n/a	Lifetime	Lifetime
Police	n/a	Lifetime	Lifetime
Public Works	n/a	Until age 70	None
Town Hall	n/a	Until age 65	Until age 65
School Clerical	n/a	Earlier of 5 years or age 65	Earlier of 3 years or age 65
School Custodial	n/a	Earlier of 3 years or age 65	Earlier of 1 year or age 65
Teachers ¹	n/a	Later of 10 years or age 65	None
Administration ¹	n/a	Later of 10 years or age 65	None

¹ If a retiree in one of these groups waives coverage, he/she is eligible to receive a fixed rebate of \$2,500 per year. For Teachers and Administration, the rebate is paid for seven years for regular retirees and for ten years for disabled retirees. This rebate is not available for spouses.

² Spouse coverage ends when the member coverage ends, including the member turning age 65 for Town Hall, Clerical or Custodial. Additionally, no subsidized coverage is available for surviving spouses. Note, in the event of the death of an active police officer, Middletown shall maintain full health insurance coverage for the widow or widower of said police officer until he/she remarries.

Dental Benefits

Subsidized dental benefits are offered for retirees in the Clerical and Custodial groups only. The length of coverage for these dental benefits is the same as for medical benefits.

Part B Benefits

Retirees in the Fire group, who retired on/after July 1, 2001 are eligible to receive reimbursement of Part B premiums if enrolled in Medicare Part B coverage upon submission to the Town per contract.

Premium Rates

The medical and dental premium rates for the plan year July 1, 2022 to June 30, 2023, applicable to Middletown's current and future retirees, are shown in the following table. For the non-Medicare plans, we also indicated the plan that the retirees will be enrolled in upon turning 65 years old. Future retirees are limited to select plans, as indicated in the Future Retirees column.

Group	Plan, Group #	Individual	Family	Plan once Age 65	Future Retirees
<i>Non-Medicare Plans</i>					
Fire Retiree	Classic, 0007	\$ 843.03	\$2,207.00	Classic, 0007	No
Fire Retiree	Classic, 0014	843.03	2,155.42	Classic, 0014	No
Fire/Fire Civilian	HDHP, 0003	553.39	1,449.30	Plan 65 w/ MM, 0008	Yes
Fire Retiree	Healthmate, 0003	749.94	1,964.85	Plan 65 w/ MM, 0008	No
Fire/Fire Civilian	Healthmate, 0006	640.92	1,678.53	Plan 65 w/ MM, 0008	Yes
Fire Retiree	Healthmate, 0007	765.48	2,005.73	Plan 65 w/ MM, 0008	No
Fire Retiree	Healthmate, 0014	765.48	2,005.73	Healthmate, 0014	No
Police	HDHP, 0004	630.36	1,652.59	Plan 65, 0010	Yes
Police Retiree	Healthmate, 0001	798.39	2,093.35	Plan 65, 0010	No
Police Retiree	Healthmate, 0011	772.40	2,025.02	Plan 65, 0010	No
Public Works	Healthmate, 0016	682.61	n/a	Plan 65, 0010	Yes
Town Hall	Healthmate, 0017	698.95	1,832.00	n/a	Yes
Clerical/Custodial	Dental, 0012	27.88	82.61	n/a	Yes
Clerical/Custodial	Healthmate, 0011	761.50	1,995.21	n/a	Yes
Teachers	Classic, 0008	817.94	n/a	Plan 65 w/ MM, 0003	No
Teachers	Healthmate, 0008	683.15	n/a	Plan 65 w/ MM, 0003	Yes
Administration	Healthmate, 0010	761.50	n/a	Plan 65 w/ MM, 0003	Yes
<i>Medicare Plans</i>					
Fire	Plan 65C w/ MM, 0008	463.05	n/a	n/a	n/a
Fire	Plan 65G w/ MM 0008	439.44	n/a	n/a	n/a
Police	Plan 65C, 0010	191.43	n/a	n/a	n/a
Police	Plan 65G, 0010	167.82	n/a	n/a	n/a
Public Works	Plan 65C, 0010	189.70	n/a	n/a	n/a
Public Works	Plan 65G, 0010	169.06	n/a	n/a	n/a
Teachers/Admin	Plan 65C w/ MM, 0003	451.27	n/a	n/a	n/a
Teachers/Admin	Plan 65G w/MM, 0003	427.66	n/a	n/a	n/a

Per MACRA Legislation, retirees eligible for Medicare effective 1/1/2020 and after can no longer have a plan that covers the Part B deductible. Newly eligible employees must be enrolled in Plan 65G.

Retiree Contribution Percentages

The retiree contribution percentages, applicable to Middletown's current and future retirees, are shown in the following table. These percentages generally apply to the premium rates. Note: Certain individuals are subject to different retiree contribution percentages; we did not consider such special cases in this valuation.

Group	Criteria	Non-Medicare	Medicare
Fire	Retired < 3/1/2011	0%	0%
Fire	< 7/1/2014	20%	0%
Fire	>= 7/1/2014 PPO	50% ¹	0%
Fire	>= 7/1/2020 HDP	0%	0%
Police	Retired < 7/1/2014	0%	0%
Police HDP \$1500/3000	Retired >= 7/1/2014, Hired < 7/1/2018	2.5%	0%
Police HDP \$2000/4000	Hired >= 7/1/2018	20%	50%
Public Works	n/a	35%	50%
Town Hall/Fire Civilian	n/a	50%	n/a
School Clerical	n/a	20%	n/a
School Custodial	n/a	20%	n/a
Teachers/Admin ²	Retired <= 9/1/2014	3%/20%/50%	3%/20%/50%
Teachers/Admin ²	Retired < 7/1/2017	10%/20%/50%	10%/20%/50%
Teachers/Admin ²	Retired < 9/1/2018	12%/20%/50%	12%/20%/50%
Teachers/Admin ²	Retired >= 9/1/2018	20%/20%/20%	20%/20%/20%

¹ This contribution percentage applies to the excess of the premium above a cap. For FYE 2023, the cap is \$5,561 for individual coverage and \$14,557 for family coverage for the PPO. This cap is scheduled to increase at 2% per annum.

² x%/y%/z% means x% for first seven years, y% for next three years, z% afterwards until age 65 or 10th anniversary whichever occurs first as defined in contract or until 10th year anniversary of retirement.

Active Contributions

All active fire fighters are required to contribute 1.5% of their base pay via payroll deduction to the OPEB trust fund.

Negotiations (Municipal)

It is our understanding that the DPW Union is still in negotiations for a contract to commence retroactively from July 1, 2021.

Other union contracts which are publicly provided on the Town's website expire as follows:

- Town NEARI contract June 30, 2025
- Library NEARI contract June 30, 2025
- Fire IAFF Local 1933 June 30, 2023
- Police FOP Lodge 21 June 30, 2024

The Town and Library contracts have been updated since the prior measurement date. Based on our review of these contracts, none of the provisions impact the benefits included in this valuation.

Negotiations (Teachers and Administration)

The Teachers and Administration group completed negotiations for a one year extension of the contract that expired August 31, 2021. We are not aware of any additional contracts beyond this extension as of the measurement date. It is our understanding the plan provisions for this group were previously changed as follows:

- All teachers and administrators who notify of retirement after August 31, 2018 shall pay 20% of the cost of medical coverage.
- All retired teachers who receive retiree coverage through a spouse or other means of coverage receive a rebate of \$2,500 per year for years 1 through 7 of retirement.
- All teachers and administrators who notify of retirement after July 1, 2020 have the following healthcare benefit based on their credited years of service (“YOS”) as of July 1, 2020.

Years of Service as of July 1, 2020	Postretirement Healthcare Benefit Eligibility
19.5 YOS or more	10 years of benefits
9.5 – 19.5 YOS	9 years of benefits
3.5 – 9.5 YOS	8 years of benefits
Less than 3.5 YOS	A maximum of 5 years or until age 65, whichever comes first

- Individuals hired on or after July 1, 2020 shall receive a maximum of three years of benefits or until age 65, whichever comes first.
- Any postretirement healthcare benefit applicable to spouses shall run concurrent with, and not exceed, the time of the retiree’s benefit.

There were no changes in the benefits for this one year extension. It is our understanding that at this time, Council 94, the Custodial Maintenance Group, has not completed negotiations for a successor agreement and benefits are following the expired contract.

Future Negotiations

Middletown Public School is in negotiations for contracts starting September 1, 2022.

These negotiations have not been reflected in this valuation.

Appendix C: Summary of Employee Data

Summary of Participant Data

Census data as of June 30, 2022.

Membership Status as of June 30, 2022	Count
Inactive plan members or beneficiaries currently receiving benefits	220
Inactive plan members entitled to but not yet receiving benefits	0
Active plan members	<u>354</u>
Total Participants	574

Number of Employees	Fire	Police	Public Works	Town Hall	Clerical & Custodial	Teachers & Administration	Total
Actives							
Count	38	38	15	31	38	194	354
Average Age	38.2	38.2	44.5	54.3	47.3	47.8	46.1
Average Service	8.2	11.2	16.1	14.9	12.6	16.1	14.3
Disabled							
Count	1	3					4
Average Age	42.8	58.0					54.2
Retirees							
Count	40	45	1	1	4	47	138
Average Age	67.6	68.1	67.3	60.3	62.4	66.9	67.3
Spouses							
Count	36	41	-	1	-	-	78
Average Age	62.4	64.2	-	62.1	-	-	63.3
Total							
Count	115	127	16	33	42	241	574

Appendix D: Required Schedules for GASB 75

Schedule of Changes in Net OPEB Liability and Related Ratios	FYE 2022	FYE 2021	FYE 2020	FYE 2019	FYE 2018	FYE 2017
Total OPEB Liability						
Service Cost	\$ 387,782	\$ 391,768	\$ 515,325	\$ 486,018	\$ 478,012	\$ 506,972
Interest	1,979,152	2,056,345	2,148,492	2,093,795	2,380,004	2,296,966
Changes of Benefit Terms	-	-	(87,428)	-	-	-
Differences Between Expected and Actual Experience	15,170	(415,551)	122,554	(312,797)	(3,021,201)	-
Changes of Assumptions	(670,676)	(1,458,153)	(2,202,682)	68,486	(2,007,827)	-
Benefit Payments	(1,624,427)	(1,575,772)	(1,625,989)	(1,644,695)	(1,661,234)	(1,674,163)
Net Change in Total OPEB Liability	\$ 87,001	\$ (1,001,363)	\$ (1,129,728)	\$ 690,807	\$ (3,832,246)	\$ 1,129,775
Total OPEB Liability at Beginning of Year	\$ 26,798,439	\$ 27,799,802	\$ 28,929,530	\$ 28,238,723	\$ 32,070,969	\$ 30,941,194
Total OPEB Liability at End of Year (a)	\$ 26,885,440	\$ 26,798,439	\$ 27,799,802	\$ 28,929,530	\$ 28,238,723	\$ 32,070,969
Plan Fiduciary Net Position						
Contributions - Employer	\$ 2,656,962	\$ 4,010,476	\$ 4,418,603	\$ 3,610,377	\$ 3,550,098	\$ 2,846,481
Contributions - Employees	29,265	25,674	22,383	22,283	21,358	-
Net Investment Income	(3,415,818)	4,452,204	283,629	528,666	520,405	726,504
Benefit Payments	(1,624,427)	(1,575,772)	(1,625,989)	(1,644,695)	(1,661,234)	(1,674,163)
Administrative Expenses	(20,403)	(24,830)	(18,747)	(21,995)	(28,500)	(32,580)
Other	-	-	-	-	-	-
Net Change in Plan Fiduciary Net Position	\$ (2,374,421)	\$ 6,887,752	\$ 3,079,879	\$ 2,494,636	\$ 2,402,127	\$ 1,866,242
Plan Fiduciary Net Position Beginning of Year	\$ 22,204,091	\$ 15,316,339	\$ 12,236,460	\$ 9,741,824	\$ 7,339,697	\$ 5,743,455
Plan Fiduciary Net Position End of Year (b)	\$ 19,829,670	\$ 22,204,091	\$ 15,316,339	\$ 12,236,460	\$ 9,741,824	\$ 7,339,697
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	73.76%	82.86%	55.10%	42.30%	34.50%	22.89%
Net OPEB Liability End of Year ((a) - (b))	\$ 7,055,770	\$ 4,594,348	\$ 12,483,463	\$ 16,693,070	\$ 18,496,899	\$ 24,731,272
Covered Employee Payroll	\$ 27,521,237	\$ 26,443,469	\$ 29,376,747	\$ 24,564,252	\$ 25,008,014	\$ 22,684,805
Net OPEB Liability as a Percentage of Covered Employee Payroll	25.64%	17.37%	42.49%	67.96%	73.96%	109.02%
Schedule of Employer Contributions						
Actuarially Determined Contribution	\$ 869,388	\$ 1,505,947	\$ 1,971,037	\$ 2,011,938	\$ 2,415,706	\$ 2,174,483
Contributions Related to the Actuarially Determined Contribution	2,656,962	4,010,476	4,418,603	3,610,377	3,550,098	2,846,481
Contribution Deficiency (Excess)	\$ (1,787,574)	\$ (2,504,529)	\$ (2,447,566)	\$ (1,598,439)	\$ (1,134,392)	\$ (671,998)
Covered Employee Payroll	\$ 27,521,237	\$ 26,443,469	\$ 29,376,747	\$ 24,564,252	\$ 25,008,014	\$ 22,684,805
Contribution as a Percentage of Covered Employee Payroll	9.65%	15.17%	15.04%	14.70%	14.20%	12.55%

Appendix E: Health Care Reform

The Patient Protection and Affordable Care Act (PPACA), was signed March 23, 2010, with further changes enacted by the Health Care and Education Affordability Reconciliation Act (HCEARA), signed March 30, 2010. This valuation uses various assumptions that were modified based on considerations under Health Care Reform legislation. This Section discusses particular legislative changes that were reflected in our assumptions. We have not identified any other specific provision of Health Care Reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we continue to monitor any potential impacts.

Employer Mandate

Health Care Reform includes various provisions mandating employer coverage for active employees, with penalties for non-compliance. Those provisions do not directly apply to the postemployment coverage included in this valuation.

Elimination of Annual or Lifetime Maximums

Health Care Reform provides that annual or lifetime maximums have to be eliminated for all “essential services”. We assume that current premium rates already reflect the required elimination of any historic maximums.

Minimum Loss Ratio

Health Care Reform includes a provision that provides that medical benefit costs paid under large group health insurance insured premiums must be at least 85% of the premiums. It is anticipated that this provision will not have any significant impact on benefits or premium levels.

Expansion of Child Coverage to Age 26

Health Care Reform mandates that coverage be offered to any child, dependent or not, through age 26, consistent with coverage for any other dependent. We have reflected the cost of child coverage by including a load for dependent children. Specifically, dependent children are assumed to be covered for as long as the spouse is covered and under age 65.

Individual Mandate

The Tax Cuts and Jobs Act passed in December 2017 included the elimination of the individual mandate penalty. It is our understanding the law does not directly impact other provisions of the ACA. While the nullification of the ACA's individual mandate penalty does not directly impact employer group health plans, it could contribute to the destabilization of the individual market and increase the number of uninsured. Such destabilization could translate to increased costs for employers. We have considered this when setting our healthcare cost trend assumptions and will continue to monitor this issue.

Inflation Reduction Act

The Inflation Reduction Act of 2022 was signed into law on August 16, 2022. The law makes a number of changes that will impact Medicare Part D plan design and financing. Additionally, the law will extend expanded ACA premium tax credits through 2025. Since this was signed prior to the measurement date, we have not reflected the impact in the valuation results.

Other Revenue Raisers

The Health Care Reform includes a variety of other revenue raisers that involve additional costs on providers (such as medical device manufacturers) and insurers. We considered these factors when developing the trend assumptions.

Other

We have not identified any other specific provision of health care reform that would be expected to have a significant impact on the measured obligation. We will continue to monitor any potential impacts of future legislation regarding health care.

Appendix F: Key Terms

Summary of Key Accounting Terms

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 present value of projected benefit payments

Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

Actuarial valuation

The determination, as of a point in time (the actuarial valuation date), of the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.

Actuarial valuation date

The date as of which an actuarial valuation is performed.

Ad hoc postemployment benefit changes

Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.

Automatic postemployment benefit changes

Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the OPEB plan) or to another variable (such as an increase in the consumer price index).

Covered-employee payroll

The payroll of employees that are provided with OPEB through the OPEB plan.

Discount rate

The 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 total of the following:

- a) The actuarial present value of benefit payments projected to be made in future periods in which (1) the amount of the OPEB plan's fiduciary net position is projected (under the requirements of GASB Statement No. 75) to be greater than the benefit payments that are projected to be made in that period and (2) OPEB plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on OPEB plan investments
- b) The actuarial present value of projected benefit payments not included in (a), calculated using a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

For defined benefit OPEB that is provided through an OPEB plan that is not administered through a trust that meets the criteria in paragraph 4 of GASB Statement No. 75, the discount rate is equal to the municipal bond rate.

Entry age actuarial cost method

A method under which the actuarial present value of the projected benefits of each individual included 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(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the Actuarial accrued liability.

Healthcare cost trend rates

The rates of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

Inactive employees

Individuals no longer employed by an employer in the OPEB plan, or the beneficiaries of those individuals. Inactive employees include individuals who have accumulated benefits under the terms of an OPEB plan but are not yet receiving benefit payments and individuals currently receiving benefits.

Measurement period

The period between the prior and the current measurement dates.

Net OPEB liability

The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

Other postemployment benefits (OPEB)

Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

Projected benefit payments

All benefits (including refunds of employee contributions) estimated to be payable through the OPEB plan (including amounts to be paid by employers or non-employer contributing entities as the benefits come due) to current active and inactive employees as a result of their past service and their expected future service.

Real rate of return

The rate of return on an investment after adjustment to eliminate inflation.

Service costs

The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.

Total OPEB liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Statement No. 75. The total OPEB liability is the liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.