



TOWN OF COLCHESTER OTHER POST-EMPLOYMENT BENEFITS PROGRAM

July 1, 2017 Actuarial Valuation

Prepared by

Teresa M. Medeiros, FSA
Consulting Actuary

Rebecca A. Sielman, FSA
Consulting Actuary

80 Lamberton Road
Windsor, CT 06095 USA
Tel +1 860.687.2110
Fax +1 860.687.2111
milliman.com

TABLE OF CONTENTS

Certification	1
Discussion of Experience	3
The Valuation Process	4
Implicit Rate Subsidies	5
Summary of Liabilities	6
Projected Payouts	7
Projected Liabilities	8
Summary of Census Data	9
Current Premiums	10
Expected Healthcare Costs	11
Glossary	12
Actuarial Method	14
Actuarial Assumptions	15
Summary of Plan Provisions	21

Certification

We have performed an actuarial valuation of the Town of Colchester Other Post-Employment Benefits Program as of July 1, 2017. The results of this valuation, along with supporting data, are set forth in the following report.

The ultimate cost of an OPEB plan is the total amount needed to provide benefits for plan members and beneficiaries and to pay the expenses of administering the plan. OPEB costs are met by contributions and by investment return on any plan assets. The principal purpose of this report is to set forth an actuarial determination of plan liabilities. In addition, this report provides:

- Information needed to meet disclosure requirements
- Review of plan experience since the last valuation to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application
- Assessment of the relative funded position of the plan, i.e., through a comparison of plan assets and projected plan liabilities
- Comments on any other matters which may be of assistance in the operation of the plan

This report may not be used for purposes other than those listed above without Milliman's prior written consent. If this report is distributed to other parties, it must be copied in its entirety, including this certification section. No attempt is being made to offer any accounting opinion or advice. The calculations reported herein have been made on a basis consistent with our understanding of the plan provisions. Additional determinations may be needed for other purposes.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law or accounting standards. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

In preparing this report, we relied on employee census data, claims and premium information as of the valuation date, furnished by the Town. We performed a limited review of the information used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Certification

In our opinion, each assumption used is individually reasonable (taking into account the experience of the plan and reasonable expectations) and, in combination, offer our best estimate of anticipated experience under the plan. On the basis of the foregoing, we hereby certify that to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

Milliman's work is prepared solely for the internal business use of the Town. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s): (a) The Town may provide a copy of Milliman's work, in its entirety, to the Town's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town; and (b) The Town may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

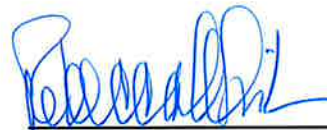
The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

December 7, 2018



Teresa M. Medeiros, FSA
Consulting Actuary



Rebecca A. Sielman, FSA
Consulting Actuary

Discussion of Experience

This valuation reflects a number of changes relative to the July 1, 2015 valuation:

Demographic Changes from 2015 to 2017

From July 1, 2015 to July 1, 2017, the overall membership decreased from 391 to 361. The total number of active members decreased from 367 to 335, and the total number of retirees and spouses of retirees increased from 24 to 26.

The average age of active members increased from 49.4 to 49.8, and the average age of retired members increased from 62.7 to 62.8.

Actuarial Assumption and Method Changes

Teachers and Administrators: Certain actuarial demographic assumptions for Teachers and Administrators are based on the assumptions used in the June 30, 2016 valuation of the Connecticut State Teachers' Retirement System. Our valuation reflects the applicable assumption changes made in the June 30, 2016 valuation. The change in this assumption decreased the Accrued Liability by about \$77,000.

Actuarial Cost Method: We changed the actuarial cost method from Projected Unit Credit to Entry Age Normal. The Entry Age Normal cost method is required starting in FY 2018 for financial reporting purposes per GASB 75; making this change provides the Town with a single set of results for all plan liability reporting purposes. The change in actuarial cost method increased the Accrued Liability by about \$58,000.

The Valuation Process

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

Turnover and retirement rates: How likely is it that an employee will qualify for post-employment benefits and when will they start?

Medical trend and claims costs assumptions: When an employee starts receiving post-employment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

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

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

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

Once the Accrued Liability and the Normal Cost have been calculated, the next step is to determine an annual contribution. This consists of three pieces:

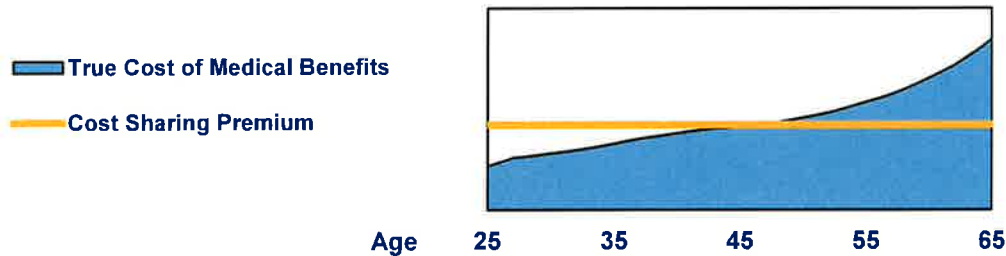
- Normal Cost – because the benefits earned each year should be paid for each year
- Past Service Cost – a catch-up payment to fund any Unfunded Accrued Liability over time
- Interest – adjusts for the time lag between the valuation date and the start of the fiscal year

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Town's financial statements. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

Implicit Rate Subsidies

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely by retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- The cost sharing premium is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:



- The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit rate subsidy". GASB 74 and 75 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based on factors developed by Milliman's health actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page. We term this amount the "gross liability".

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors. We term this amount the "offset liability".

Finally, the net liability for the Town is calculated as the difference between the gross liability and the offset liability.

Summary of Liabilities

We have calculated the Accrued Liability separately for four groups of Town employees, who are eligible for different OPEB benefits. We have broken the accrued liability for each group into several pieces: benefits that are expected to be paid prior to age 65 (i.e., prior to Medicare) and after age 65 (i.e., after Medicare) to current active members and their covered dependents after retirement, and the same figures for members who have already retired and are currently receiving benefits. In all cases, the Accrued Liability only reflects benefits that are paid for by the Town, taking into account any implicit rate subsidies.

	Police & Fire	Town	BOE Certified	BOE Non- Certified	Total
Current active members					
Employees under age 65	\$67,045	\$169,424	\$2,121,394	\$45,324	\$2,403,187
Employees over age 65	0	0	293,417	0	293,417
Dependents under age 65	14,415	86,067	602,681	11,023	714,186
Dependents over age 65	0	0	<u>128,841</u>	0	<u>128,841</u>
Total	81,460	255,491	3,146,333	56,347	3,539,631
Current retired members					
Employees under age 65	0	0	476,025	0	476,025
Employees over age 65	0	0	1,797,856	0	1,797,856
Dependents under age 65	0	0	71,896	0	71,896
Dependents over age 65	0	0	<u>13,009</u>	0	<u>13,009</u>
Total	0	0	2,358,786	0	2,358,786
Total Accrued Liability	81,460	255,491	5,505,119	56,347	5,898,417

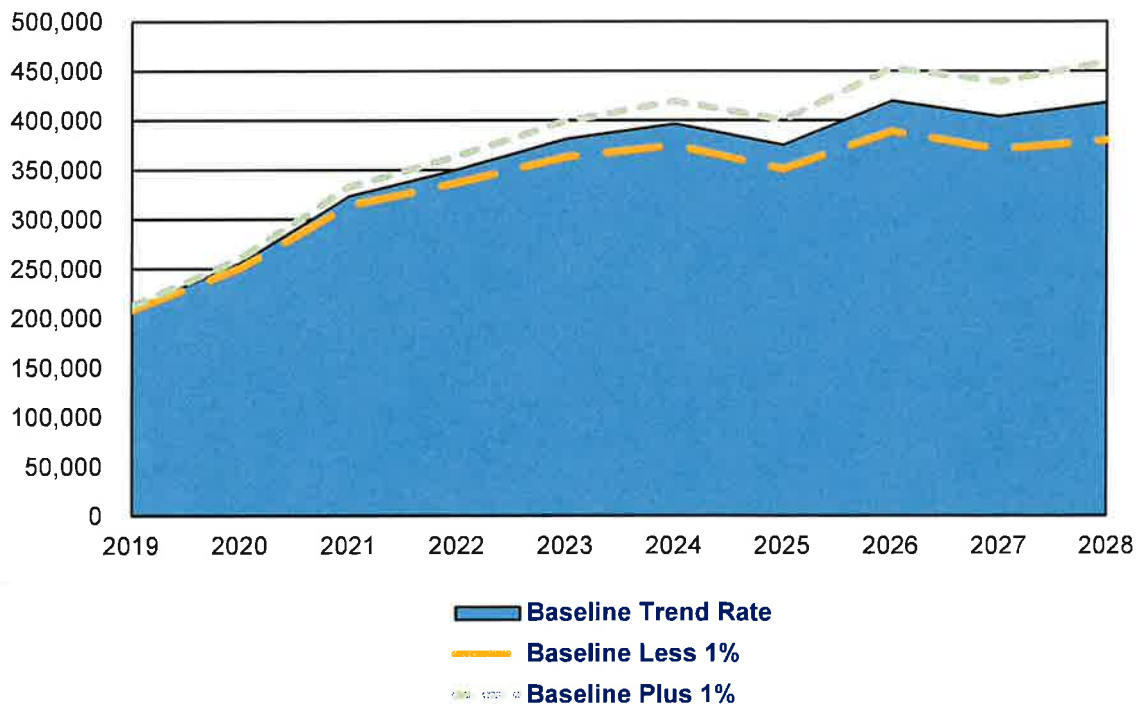
The following presents information regarding how sensitive the Accrued Liability is to changes in either the discount rate or the trend rate.

Discount Rate Sensitivity	1% Decrease 3.00%	Baseline 4.00%	1% Increase 5.00%
	6,556,024	5,898,417	5,331,627
Trend Rate Sensitivity	1% Decrease	Baseline	1% Increase
	5,200,497	5,898,417	6,738,347

Projected Payouts

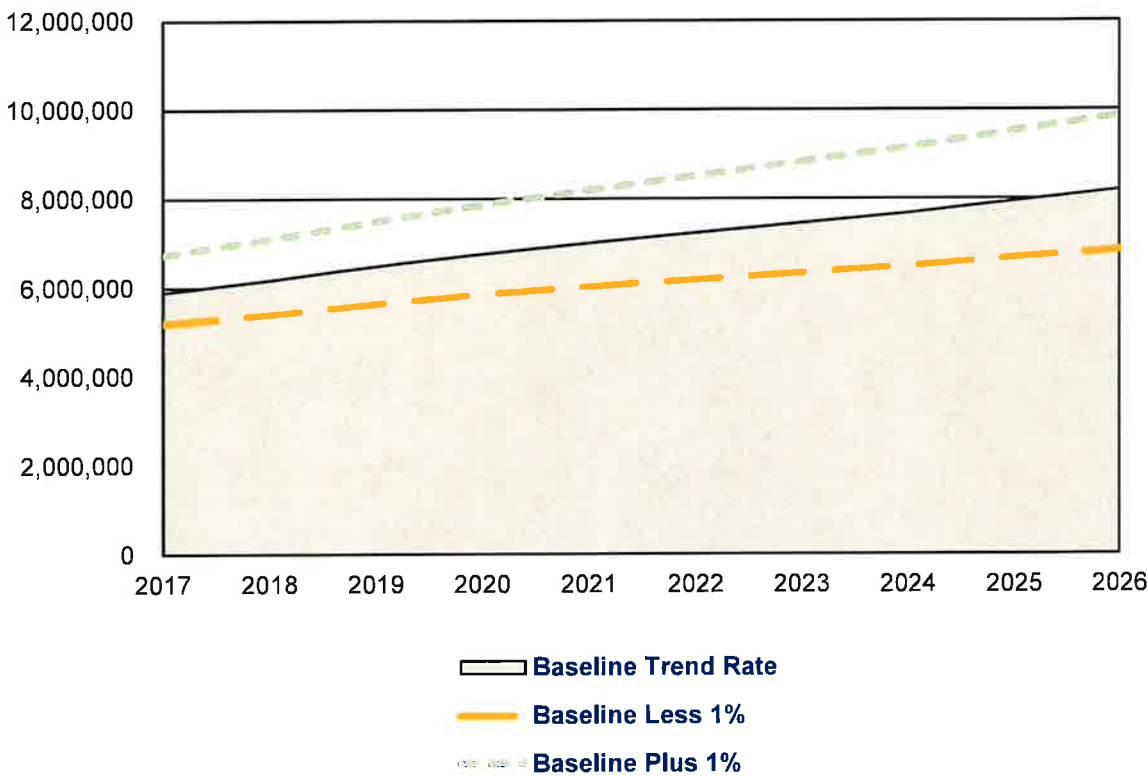
The table and graph below show the expected annual payments for OPEB benefits for the next 10 years.

Fiscal Year	Baseline Less 1%	Baseline Trend Rate	Baseline Plus 1%
2019	\$208,327	\$210,314	\$212,301
2020	251,071	255,885	260,745
2021	314,592	323,683	332,948
2022	337,612	350,674	364,112
2023	363,436	381,072	399,386
2024	374,884	396,794	419,761
2025	351,196	375,243	400,688
2026	389,345	419,943	452,624
2027	371,277	404,248	439,795
2028	380,638	418,368	459,430



Projected Liabilities

The graph below shows how the Town's accrued liability for OPEB benefits is expected to grow over the next 10 years.



Summary of Census Data

The following were included in our analysis based on information provided as of July 1, 2017 by the Town.

	Police & Fire	Town	BOE Certified	BOE Non- Certified	Total
Number of members					
Active	13	52	174	96	335
Retired members	0	0	21	0	21
Spouses of retirees	0	0	5	0	5
Total	13	52	200	96	361
Average age					
Active	39.8	50.8	48.1	53.6	49.8
Retired members	N/A	N/A	62.8	N/A	62.8
Average retirement age					
Active	52.8	61.8	60.8	63.1	61.3
Retired members	N/A	N/A	57.7	N/A	57.7
Expected lifetime					
Active [to retirement]	13.0	10.9	12.7	9.5	11.5
Retired [lifetime]	N/A	N/A	24.4	N/A	24.4

The retiree census data excludes post-65 Medicare eligible retired members who are paying 100% of the premium.

Where complete census data was not available, we have made assumptions which we believe to be reasonable.

Current Premiums

Based on information provided by the Town regarding current plan elections, the following weighted average blended actual premiums were used:

2017 - 2018 Monthly Premiums	Employee	Spouse
Medical - Town	\$765.46	\$766.09
Medical - BOE	806.60	807.24

Expected Healthcare Costs

Milliman's Health Cost Guidelines were used to develop the expected true cost of health care benefits by age. Representative health care costs (per person per month) are shown below.

Age	Town			
	Employee	Spouse		
40	\$689	\$580		
45	749	660		
50	828	782		
55	967	931		
60	1,186	1,126		
65	N/A	N/A		
70	N/A	N/A		
75	N/A	N/A		
80	N/A	N/A		

Age	BOE (Medicare Eligible)		BOE (Non-Medicare Eligible)	
	Employee	Spouse	Employee	Spouse
40	\$861	\$515	\$861	\$515
45	908	605	908	605
50	969	743	969	743
55	1,088	914	1,088	914
60	1,295	1,137	1,295	1,137
65	N/A	N/A	1,705	1,520
70	N/A	N/A	2,052	1,842
75	N/A	N/A	2,454	2,217
80	N/A	N/A	2,854	2,587

It is assumed that there is no implicit rate subsidy associated with dental benefits. Unadjusted age premium rates were used to value these benefits.

Glossary

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost. The statement assumes a closed group of employees and other participants unless otherwise stated; that is, no new entrants are assumed. Six methods are permitted under GASB 45 – Unit Credit, Entry Age Normal, Attained Age, Aggregate, Frozen Entry Age, and Frozen Attained Age. Entry Age Normal is required under GASB 75.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the discount rate, medical cost inflation, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the value, as of the applicable date, of future payments for benefits and expenses under the Plan, where each payment is: a) Multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) Discounted at the assumed discount rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the Plan, as used by the actuary for the purpose of an Actuarial Valuation.

Amortization Payment - This is the amount of the contribution required to pay interest on and to amortize over a given period the Unfunded Actuarial Accrued Liability. A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each actuarial valuation date.

Actuarially Determined Contribution (“ADC”) - This is the employer’s periodic contributions to a defined benefit OPEB plan, calculated in accordance with actuarial standards of practice.

Attribution Period - The period of an employee’s service to which the expected postretirement benefit obligation for that employee is assigned. The beginning of the attribution period is the employee’s date of hire and costs are spread across all employment.

Benefit Payments - The monetary or in-kind benefits or benefit coverage to which participants may be entitled under a post-employment benefit plan, including health care benefits and life insurance not provided through a pension plan.

Glossary

Discount Rate - GASB 75 requires that the interest rate used to discount future benefit payments back to the present day be based on the expected rate of return on any investments set aside to pay for these benefits. If no funds are set aside for this purpose, the discount rate is based on a municipal bond index at the measurement date.

Implicit Rate Subsidy - This is the excess of the expected health care cost per retired member over the gross premium charged for that coverage. In most cases, the gross premium charged to a retiree is less than the expected health care cost, since the premium is a blended average rate that does not fully reflect the above-average, increasing costs by age that apply during retirement.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Other Post-Employment Benefits (“OPEB”) - This refers to post-employment benefits other than pension benefits, including healthcare benefits regardless of the type of plan that provides them, and all other post-employment benefits provided separately from a pension plan, excluding benefits defined as termination benefits or offers.

Past Service Cost - This is a catch-up payment to fund the Unfunded Actuarial Accrued Liability over time (generally 10 to 30 years). Also known as the Amortization Payment.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Substantive Plan - The terms of the postretirement benefit plan as understood by an employer that provides postretirement benefits and the employees who render services in exchange for those benefits. The substantive plan is the basis for the accounting for the plan.

Trend Rate - This is the rate at which medical or dental costs are assumed to increase over time.

Unfunded Accrued Liability - This is the excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Actuarial Method

The actuarial funding method used is the **Entry Age Normal Cost Method**. Recommended annual contributions consist of three pieces: Normal Cost plus a payment towards the Unfunded Accrued Liability plus Interest to reflect the time lag between the valuation date and the fiscal year.

The **Normal Cost** is determined by calculating the present value of future benefits for present active Members that will become payable as the result of death, disability, retirement or termination. This cost is then spread as a level percentage of earnings from entry age to termination as an Active Member. If Normal Costs had been paid at this level for all prior years, a fund would have accumulated. Because this fund represents the portion of benefits that would have been funded to date, it is termed the **Accrued Liability**. In fact, it is calculated by adding the present value of benefits for Retired Members and Terminated Vested Members to the present value of benefits for Active Members and subtracting the present value of future Normal Cost contributions.

The **Unfunded Accrued Liability** is the Accrued Liability less the value of any plan assets.

Actuarial Assumptions

Each of the assumptions used in this valuation was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgment regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Discount Rate 4.00%

Inflation Rate 2.75%

Medical Inflation Rate 5.80% - 4.70% over 65 years

Salary Scale **Teachers and Administrators[#]**

Service	Rate
0-1	6.50%
2-9	6.25%
10-11	5.50%
12-14	5.00%
15	4.75%
16	4.50%
17	4.25%
18	4.00%
19	3.75%
20	3.50%
21+	3.25%

All Others 3.50%

Healthy Mortality

Teachers and Administrators[#]: RP-2000 Combined Healthy Mortality Table for males and females, projected forward 19 years using Scale AA, with a two-year age setback. This assumption includes a margin for mortality improvement beyond the valuation date.

All Others: RP-2000 Combined Healthy Mortality Table for males and females, with generational projection using Scale AA. This assumption includes a margin for mortality improvement beyond the valuation date.

Disabled Mortality

Teachers and Administrators[#]: RP-2000 Combined Healthy Mortality Table for males and females, projected forward 19 years using Scale AA, with an eight-year age set forward. This assumption includes a margin for mortality improvement beyond the valuation date.

All Others: N/A.

Actuarial Assumptions

Turnover

Teachers and Administrators[#]: rates based on gender and length of service for the first ten years and gender and age thereafter:

Current:

Service	Male	Female
0-1	14.00%	12.00%
1-2	11.00%	10.50%
2-3	8.00%	8.75%
3-4	6.50%	7.50%
4-5	4.50%	6.75%
5-6	3.50%	6.00%
6-7	3.00%	5.25%
7-8	2.75%	4.75%
8-9	2.50%	4.25%
10+	2.50%	4.00%

Age	Male	Female
25	1.50%	4.00%
35	1.50%	3.50%
45	1.59%	1.50%
55	3.44%	2.50%

Prior:

Service	Male	Female
0-1	14.00%	12.00%
1-2	8.50%	9.00%
2-3	5.50%	7.00%
3-4	4.50%	6.00%
4-5	3.50%	5.50%
5-6	2.50%	5.00%
6-7	2.40%	4.50%
7-8	2.30%	3.50%
8-9	2.20%	3.00%
9-10	2.10%	2.50%

Age	Male	Female
25	1.20%	3.50%
35	1.20%	3.50%
45	1.26%	1.30%
55	2.76%	1.60%

Police: None.

Actuarial Assumptions

Turnover

All Others: Rates based on age:

Age	Rate
20	14.00%
25	10.20%
30	7.07%
35	5.53%
40	4.55%
45	3.85%
50	2.70%
55	0.00%

Retirement

Teachers and **Administrators**[#]: rates based on age, eligibility for pension benefits, and gender:

Current:

Age	Unreduced		Proratable		Reduced	
	Male	Female	Male	Female	Male	Female
50	27.50%	27.50%			1.00%	1.00%
51	27.50%	27.50%			1.00%	1.25%
52	27.50%	27.50%			1.00%	1.75%
53	27.50%	27.50%			2.00%	2.25%
54	27.50%	27.50%			3.00%	2.75%
55	38.50%	27.50%			4.00%	4.75%
56	38.50%	27.50%			6.00%	6.25%
57	38.50%	27.50%			7.00%	6.75%
58	38.50%	27.50%			8.00%	7.25%
59	38.50%	27.50%			11.00%	8.50%
60	22.00%	27.50%	6.00%	5.50%		
61	25.30%	27.50%	6.00%	6.50%		
62	25.30%	27.50%	9.00%	7.50%		
63	27.50%	27.50%	11.00%	7.50%		
64	27.50%	27.50%	10.00%	8.00%		
65	36.30%	32.50%	13.00%	12.50%		
66-67	27.50%	32.50%	20.00%	12.50%		
68	27.50%	32.50%	20.00%	12.00%		
69	27.50%	32.50%	30.00%	14.50%		
70-73	100.00%	32.50%	30.00%	14.50%		
74-79	100.00%	32.50%	30.00%	18.00%		
80	100.00%	100.00%	100.00%	100.00%		

Actuarial Assumptions

Retirement

Prior:

	Unreduced	Proratable	Reduced	
50 – 51	27.50%	15.00%	2.00%	2.00%
52	27.50%	15.00%	2.50%	3.00%
53	27.50%	15.00%	3.00%	3.50%
54	27.50%	15.00%	4.00%	4.00%
55	38.50%	30.00%	4.50%	6.00%
56	38.50%	30.00%	6.00%	7.00%
57	38.50%	30.00%	9.00%	7.50%
58	38.50%	30.00%	10.00%	8.00%
59	38.50%	30.00%	11.00%	8.50%
60	22.00%	20.00%	6.00%	5.40%
61	25.30%	22.50%	6.00%	7.20%
62	25.30%	22.50%	15.00%	9.90%
63-64	27.50%	22.50%	10.00%	7.20%
65	36.30%	30.00%	20.00%	13.50%
66	27.50%	30.00%	20.00%	10.80%
67	27.50%	30.00%	20.00%	13.50%
68	27.50%	30.00%	20.00%	10.80%
69	27.50%	30.00%	35.00%	10.80%
70-73	100.00%	40.00%	35.00%	10.80%
74	100.00%	40.00%	35.00%	18.00%
75 – 79	100.00%	40.00%	40.00%	18.00%
80	100.00%	100.00%	40.00%	18.00%

Police: 10% of employees are assumed to retire when first eligible for normal retirement. 5% of employees are assumed to retire in the years thereafter. 100% of employees are assumed to retire at 24 years of service.

All Others: Rates based on age:

Age	First Year Eligible	All Other Ages
55	15%	6%
56	15%	6%
57	15%	7%
58-59	15%	7%
60-61	15%	10%
62-64	15%	15%
65	25%	25%
66-69	20%	20%
70	100%	100%

Actuarial Assumptions

Disability

Teachers, Administrators and Central Office Administrators[#]: Rates based on age and gender:

Current:

Age	Male	Female
20	0.0341%	0.0500%
30	0.0341%	0.0410%
40	0.0536%	0.0720%
50	0.2438%	0.2630%
60	0.9604%	0.5000%

Prior:

Age	Male	Female
20	0.0455%	0.0500%
30	0.0455%	0.0410%
40	0.0715%	0.0720%
50	0.3250%	0.2630%
60	1.2805%	0.5000%

Police: None.

All Others: The 1952 Disability Study of the Society of Actuaries, Period 2, Benefit 5 rates.

Future Retiree Coverage 95% of **Teachers** and **Administrators**, 90% of **Police** and **Fire**, 70% of **Town** and 10% of **BOE Non-Certified** active members are assumed to elect coverage at retirement.

Future Dependent Coverage Current active members are assumed to elect dependent coverage at retirement as follows. All female spouses are assumed to be three years younger than males.

	Male	Female
Teachers and Administrators	60%	50%
Police, Fire and Town	50%	50%
BOE Non-Certified	50%	25%

Future Post-65 Coverage **Teachers and Administrators:** 90% of current actives and pre-65 retirees are assumed either to enroll in retiree health coverage through the Connecticut State Teachers' Retirement System at age 65, or transfer to a Medicare Supplement Plan. 95% of current actives and pre-65 retirees are assumed to be Medicare-eligible. (Prior: 95%)

All Others: N/A.

Actuarial Assumptions

Valuation of Dental and Post-65 Medicare Eligible Medical Benefits It is assumed that there is no implicit rate subsidy associated with dental benefits or with post-65 medical benefits for Medicare eligible retired members who are paying 100% of the premium.

Certain actuarial demographic assumptions for Teachers and Administrators are based on the assumptions used in the June 30, 2016 valuation of the Connecticut State Teachers' Retirement System; however, the Healthy and Disabled Mortality assumptions are based on the June 30, 2014 valuation of the Connecticut State Teachers' Retirement System.

Summary of Plan Provisions

This summary is intended only to describe our understanding of the essential features of the benefits that will be provided to future retirees based on copies of bargaining agreements, applicable personnel rules and the benefits being currently provided to retired members. All eligibility requirements and benefit amounts shall be determined in strict accordance with the relevant plan documents. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility

BOE Certified (Teachers and Administrators)

A Teacher or Administrator retiring shall be eligible to receive health benefits for self and spouse.

Normal Retirement for Teachers and Administrators is the earliest of age 60 with 20 years of service, or completion of 35 years of service regardless of age. Early Retirement is the earliest of age 60 with 10 years of service, any age with 25 years of service, or age 55 with 20 years of service.

BOE Non-Certified – Custodians and Maintenance

Retired employee shall be eligible to receive health benefits for self and spouse.

BOE Non-Certified – Central Office, Education Personnel, Nurses, Office Professionals and Non-Union

Employee retiring with at least 20 years of service shall be eligible to receive health benefits for self and spouse.

Police

Members who have retired on or after July 1, 2000 under the Colchester Police Department Pension Plan with at least 10 years of service shall be eligible to receive health benefits for self and spouse. Normal Retirement for Police Officers is 20 years of service.

Town Hall Local 1303 and Library

Employee hired prior to July 1, 2009 and retiring on or after July 1, 2009 with at least 10 years of service shall be eligible to receive health benefits for self and spouse.

Town MEUI Local 506

Employee retiring on or after July 1, 1999 (July 1, 1998 for Town Administrators) shall be eligible to receive health benefits for self and spouse.

Fire and Town Non-Union

Members who have retired on or after July 1, 2000 with at least 10 years of service shall be eligible to receive health benefits for self and spouse.

Summary of Plan Provisions

Cost Sharing

BOE Certified (Teachers and Administrators)

Retiree/Spouse – 100% retiree-paid (less \$1,320 annual Connecticut Teachers' Retirement Board subsidy).

BOE Non-Certified

Retiree/Spouse – 100% retiree-paid.

Police, Fire and Town

Retiree/Spouse – 100% retiree-paid for a period not to exceed 5 years. Coverage is pre-65 only.

Post-65 – Eligible retiree is offered Medicare risk plan at own expense.