Milliman

GUILFORD PUBLIC SCHOOLS
OTHER POST-EMPLOYMENT BENEFITS PROGRAM

GASB 75 DISCLOSURE
Fiscal Year: July 1, 2017 to June 30, 2018

Prepared by

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November 9, 2018

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Certification

Actuarial computations presented in this report under Statements 75 of the Governmental Accounting Standards Board are for purposes of assisting the Town in fulfilling its financial accounting requirements. No attempt is being made to offer any accounting opinion or advice. This report is for fiscal year July 1, 2017 to June 30, 2018. The reporting date for determining plan assets and obligations is June 30, 2018. The calculations enclosed in this report have been made on a basis consistent with our understanding of the plan provisions. Determinations for purposes other than meeting financial reporting requirements may be significantly different than the results contained in this report. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security or meeting employer funding requirements.

In preparing this report, we relied, without audit, on information as of July 1, 2016 and June 30, 2017 furnished by the Guilford Public Schools. This information includes, but is not limited to, statutory provisions, member census data, and financial information.

We performed a limited review of the census and financial information used directly in our analysis and have found them to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

We hereby certify that, to the best of our knowledge, this report, including all costs and liabilities based on actuarial assumptions and methods, is complete and accurate and determined in conformance with generally recognized and accepted actuarial principles and practices, which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Code of Professional Conduct, amplifying Opinions and supporting Recommendations of the American Academy of Actuaries.

This valuation report is only an estimate of the plan's financial condition as of a single date. It can neither predict the plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of plan benefits, only the timing of plan contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, 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. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.

Certification

Milliman's work is prepared solely for the internal use and benefit of the Town of Guilford. 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 exceptions: (a) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to the Plan Sponsor'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 Plan Sponsor 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 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.

Assumptions related to the claims cost and healthcare trend (cost inflation) rates for the retirees healthcare program discussed in this report were determined by Milliman actuaries qualified in such matters.

The Patient Protection and Affordable Care Act of 2010 (ACA) has been reflected in this valuation with respect to the following:

• Anticipation of fees and surcharges effective in future calendar years, including fees associated with Patient-Centered Outcomes Research Trust Fund, reinsurance fees, and insured plan fees, to the extent applicable.
• Expectation of the excise tax on high cost

This valuation reflects the Consolidated Appropriations Act, 2016, which waived the insured plan fees for 2017, and made changes to the implementation of the excise tax.

The results reflect our current understanding of the ACA based on the proposed and final regulations that have been released. Since the regulations are emerging and constantly changing, future results may need to

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

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and has been prepared in accordance with generally recognized accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Markella Roma, FSA, EA, MAAA	Jeff Reardon, EA, MAAA
Actuary	Actuary

November 9, 2018

Overview of GASB 74 and GASB 75

The Governmental Accounting Standards Board (GASB) released new accounting standards for public postemployment benefit plans other than pension (OPEB) and participating employers in 2015. These standards, GASB Statements No. 74 and 75, have substantially revised the accounting requirements previously mandated under GASB Statements No. 43 and 45. The most notable change is the that the Annual Required Contribution (ARC) has been eliminated and the Net OPEB Liability will be an item on the employer's financial statement rather than a footnote entry.

GASB 74 applies to financial reporting for public OPEB plans funded by OPEB trusts and is required to be implemented for plan fiscal years beginning after June 15, 2016. Note that a plan's fiscal year might not be the same as the employer's fiscal year. Even if the plan does not issue standalone financial statements, but rather is considered a trust fund of a government, it is subject to GASB 74. Under GASB 74, enhancements to the financial statement disclosures are required, along with certain required supplementary information.

GASB 75 governs the specifics of accounting for public OPEB plan obligations for participating employers and is required to be implemented for employer fiscal years beginning after June 15, 2017. GASB 75 requires a liability for OPEB obligations, known as the Net OPEB Liability (Total OPEB Liability for unfunded plans), to be recognized on the balance sheets of participating employers. Changes in the Net OPEB Liability (Total OPEB Liability for unfunded plans) will be immediately recognized as OPEB Expense on the income statement or reported as deferred inflows/outflows of resources depending on the nature of the change.

Executive Summary

Relationship Between Valuation Date, Measurement Date, and Reporting Date

The Valuation Date is July 1, 2016. This is the date as of which the actuarial valuation is performed. The Measurement Date is June 30, 2017. This is the date as of which the total OPEB liability is determined. The Reporting Date is June 30, 2018. This is the plan's and/or employer's fiscal year ending date.

Significant Changes

There have been no significant changes between the valuation date and fiscal year end.

Funding Method

As required by GASB 75, the funding method was changed from Projected Unit Credit to Entry Age Normal, and the discount rate was changed to use a municipal bond index. These changes increased the liability by approximately $0.9 million.

Assumptions

The following changes from the assumptions in the prior valuation were made:

At the end of the fiscal year, the discount rate changed from 2.85% to 3.58%. This change decreased the liability by approximately $1.9 million.

Total OPEB Liability

Total OPEB Liability	June 30, 2016	June 30, 2017
Total OPEB liability	$18,364,349	$17,139,731
Covered payroll	N/A	N/A
Total OPEB liability as a % of covered payroll	N/A	N/A

The total OPEB liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions below, and was then projected forward to the measurement date. Any significant changes during this period have been reflected as prescribed by GASB 75.

Discount Rate

Discount rate	2.85%	3.58%
20 Year Tax-Exempt Municipal Bond Yield	2.85%	3.58%

The discount rate was based on the Bond Buyer General Obligation 20-Bond Municipal Index. Discount rates are as of the measurement dates.

Please refer to Appendix A for a summary of actuarial methods and assumptions used in this valuation.

Please see Milliman's valuation report dated November 2, 2017 for more detail.

Changes in Total OPEB Liability

Changes in Total OPEB Liability	Increase / (Decrease) Total OPEB Liability
Balance as of June 30, 2017 (Measurement date June 30, 2016)	$18,364,349
Changes for the year:	
Service cost	484,208
Interest on total OPEB liability	532,493
Effect of plan changes	0
Effect of economic/demographic gains or losses	0
Effect of assumptions changes or inputs	(1,909,800)
Benefit payments	(331,519)
Balance as of June 30, 2018 (Measurement date June 30, 2017)	17,139,731

Sensitivity Analysis

The following presents the total OPEB liability of the Town, calculated using the discount rate of 3.58%, as well as what the Town's total OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.58%) or 1 percentage point higher (4.58%) than the current rate.

	1% Decrease 2.58%	Discount Rate 3.58%	1% Increase 4.58%
Total OPEB liability	$19,827,243	$17,139,731	$14,917,708

The following presents the total OPEB liability of the Town, calculated using the current healthcare cost trend rates as well as what the Town's total OPEB liability would be if it were calculated using trend rates that are 1 percentage point lower or 1 percentage point higher than the current trend rates.

	1% Decrease	Current Trend Rate	1% Increase
Total OPEB liability	$14,666,172	$17,139,731	$20,152,117

Schedule of Changes in Total OPEB Liability and Related Ratios

	Fiscal Year Ending June 30									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Total OPEB Liability										
Service cost	$484,208	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interest on total OPEB liability	532,493	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Effect of plan changes	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Effect of economic/demographic gains or (losses)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Effect of assumption changes or inputs	(1,909,800)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benefit payments	(331,519)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net change in total OPEB liability	(1,224,618)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB liability, beginning	18,364,349	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB liability, ending (a)	17,139,731	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB liability as a % of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

This schedule is presented to illustrate the requirement to show information for 10 years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the current GASB standards, they should not be reported.

Notes to Schedule

Changes of assumptions: Changes of assumptions include the effects of changes in the discount rate each period.

OPEB Expense

OPEB Expense	July 1, 2016 to June 30, 2017	July 1, 2017 to June 30, 2018
Service cost	N/A	$484,208
Interest on total OPEB liability	N/A	532,493
Effect of plan changes	N/A	0
Recognition of Deferred Inflows/Outflows of Resources		
Recognition of economic/demographic gains or losses	N/A	0
Recognition of assumption changes or inputs	N/A	(238,725)
OPEB Expense	N/A	777,976

As of June 30, 2018, the deferred inflows and outflows of resources are as follows:

Deferred Inflows / Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	$0	$0
Changes of assumptions	(1,671,075)	0
Net differences between projected and actual earning	0	0
Contributions made subsequent to measurement date	Employer Determined	Employer Determined
Total	(1,671,075)	0

Amounts currently reported as deferred outflows of resources and deferred inflows of resources related to other postemployment benefits will be recognized in OPEB expense as follows:

Year ended June 30:	
2019	($238,725)
2020	(238,725)
2021	(238,725)
2022	(238,725)
2023	(238,725)
Thereafter*	(477,450)

* Note that additional future deferred inflows and outflows of resources may impact these numbers.

Schedule of Deferred Inflows and Outflows of Resources

	Original Amount	Date Established	Original Rec. Period*	Amount Recognized in Expense for FYE 06/30/2018	Amount Recognized in Expense through 06/30/2018	Balance of Deferred Inflows 06/30/2018	Balance of Deferred Outflows 06/30/2018
Economic/ demographic (gains) or losses	$0	6/30/2018	0.0	$0	$0	$0	$0
		Total		0	0	0	0
Assumption changes or inputs	(1,909,800)	6/30/2018	8.0	(238,725)	(238,725)	(1,671,075)	0
		Total		(238,725)	(238,725)	(1,671,075)	0
Total deferred (inflows)/outflows						(1,671,075)	0
Total net deferrals						(1,671,075)	

* Economic/demographic (gains)/losses and assumption changes or inputs are recognized over the average remaining service life for all active and inactive members.

	Total OPEB Liability	Deferred Inflows	Deferred Outflows	Net Deferrals	Total OPEB Liability plus Net Deferrals	Annual Expense
Balances as of June 30, 2017	($18,364,349)	$0	$0	$0	($18,364,349)	
Service cost	(484,208)					484,208
Interest on total OPEB liability	(532,493)					532,493
Effect of plan changes	0					0
Effect of liability gains or losses	0			0		
Effect of assumption changes or inputs	1,909,800	(1,909,800)		(1,909,800)		
Benefit payments	331,519				331,519	
Recognition of liability gains or losses				0		0
Recognition of assumption changes or inputs		238,725		238,725		(238,725)
Annual expense					(777,976)	777,976
Balances as of June 30, 2018	(17,139,731)	(1,671,075)	0	(1,671,075)	(18,810,806)	

Projected Benefit Payments

The table below shows the expected annual payments for retiree medical bneefits for the next 10 years for the School.

Valuation Year	Expected Benefit Payments
2018	411,807
2019	472,379
2020	545,699
2021	598,410
2022	662,569
2023	734,656
2024	787,134
2025	808,060
2026	844,202
2027	902,608

Glossary

Deferred Inflows/Outflows of Resources
Portion of changes in net OPEB liability that is not immediately recognized in OPEB Expense. These changes include differences between expected and actual experience, changes in assumptions, and differences between expected and actual earnings on plan investments.

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

1) The actuarial present value of benefit payments projected to be made in future periods where the plan assets are projected to be sufficient to meet benefit payments, calculated using the Long-Term Expected Rate of Return.
2) The actuarial present value of projected benefit payments not included in (1), calculated using the Municipal Bond Rate.

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

Projected Benefit Payments
All benefits estimated to be payable through the OPEB plan to current active and inactive employees as a result of their past service and expected future service.

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

Total OPEB Liability
The portion of actuarial present value of projected benefit payments that is attributable to past periods of member service using the Entry Age Normal cost method based on the requirements of GASB 74 and 75.

Appendix A

Summary of Actuarial Methods and Assumptions

Actuarial Methods

Actuarial Cost Method: Entry Age Normal as required by GASB 75.

Asset Valuation Method: Not applicable. The plan is not funded.

Economic Assumptions

Discount Rates

June 30, 2017 Assumption: 2.85%, compounded annually.

June 30, 2018 Assumption: 3.58%, compounded annually.

Rationale: This assumption is based on the 20-Bond GO Bond Buyer municipal bond index based on a 6/30 measurement date. This is a prescribed assumption.

CPI

Assumption: 2.60%, compounded annually.

Rationale: We considered the 30-year breakeven inflation rate in combination with the CBO's 75-year forecast to arrive at this assumption.

Salary Increases

Assumption: 2.75%, compounded annually. This assumption represents an estimate of future experience.

Rationale: This assumption was selected based upon the results of our analyses of plan experience as described in our reports on the 2015 Salary Increase Experience Study dated November 16, 2015.

Demographic Assumptions

We believe the demographic assumptions shown below are reasonable for the contingencies they are measuring and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Mortality

Assumption:

> **Healthy Mortality:** RPH-2014 Employee/Healthy Annuitant sex distinct Mortality Tables adjusted to reflect scale MP2014 from the 2006 base year, and projected forward using scale MP-2016.
>
> **Disabled Mortality:** RP-2014 Disabled Annuitant sex distinct Mortality Tables adjusted to reflect scale MP-2014 from the 2006 base year, and projected forward using scale MP-2016.

Rationale: This plan is not large enough to develop a credible mortality table based exclusively on plan experience. We have relied on the above mentioned published mortality table in which credible mortality experience was analyzed.

Withdrawal

Assumption: Rates are based on age and length of service for the first ten years and age thereafter. Sample rates are as follows:

Male:

Age	Years of Service 0	3	5	7	9	10+
<=42	14.0%	4.5%	2.5%	2.3%	2.1%	1.20%
45	14.0%	4.5%	2.5%	2.3%	2.1%	1.26%
50	14.0%	4.5%	2.5%	2.3%	2.1%	1.96%
55	14.0%	4.5%	2.5%	2.3%	2.1%	2.76%
>=60	14.0%	4.5%	2.5%	2.3%	2.1%	3.00%

Female:

Age	Years of Service 0	3	5	7	9	10+
<=37	12.0%	6.0%	5.0%	3.5%	2.5%	3.50%
40	12.0%	6.0%	5.0%	3.5%	2.5%	2.30%
45	12.0%	6.0%	5.0%	3.5%	2.5%	1.30%
50	12.0%	6.0%	5.0%	3.5%	2.5%	1.25%
55	12.0%	6.0%	5.0%	3.5%	2.5%	1.60%
60	12.0%	6.0%	5.0%	3.5%	2.5%	1.90%

Rationale: This assumption was developed based on industry standard termination rates as well as the plan's historical experience and is similar to the withdrawal assumption in the Connecticut State Teachers' Retirement System GASB 67 report as of June 30, 2014.

Retirement

Assumption: Sample rates are as follows:

Male:

Age	Less than 20 years of service*	20 through 24 years of service	25 through 34 years of service	35 or more years of service
50	0.0%	0.0%	2.0%	27.5%
55	0.0%	4.5%	4.5%	38.5%
60	6.0%	22.0%	22.0%	22.0%
65	20.0%	36.3%	36.3%	36.3%
70	35.0%	100.0%	100.0%	100.0%
75	40.0%	100.0%	100.0%	100.0%
>=80	100%	100.0%	100.0%	100.0%

Female:

Age	Less than 20 years of service*	20 through 24 years of service	25 through 34 years of service	35 or more years of service
50	0.0%	0.0%	2.0%	15.0%
55	0.0%	6.0%	6.0%	30.0%
60	5.4%	20.0%	20.0%	20.0%
65	13.50%	30.0%	30.0%	30.0%
70	10.8%	40.0%	40.0%	40.0%
75	18.0%	40.0%	40.0%	40.0%
>=80	100%	100.0%	100.0%	100.0%

*Retirement rates for less than 10 years of service are 0%.

Rationale: This assumption was developed based on the plan's historical experience. In addition, we have considered sponsor input, eligibility criteria for the benefits, our experience with similar populations and industries, eligibility criteria for social insurance programs, and economic conditions that might have influenced prior experience or may impact future experience. This assumption is similar to the retirement assumption in the Connecticut State Teachers' Retirement System GASB 67 report as of June 30, 2014.

Disability

Assumption: Rates are based on age. Sample rates are as follows:

Age	Male	Female
25	0.0455%	0.0500%
30	0.0455%	0.0410%
35	0.0455%	0.0410%
40	0.0715%	0.0720%
45	0.1625%	0.1200%
50	0.3250%	0.2630%
55	0.7150%	0.4380%
60	1.2805%	0.5000%

Rationale: This assumption was developed based on industry standard disability rates as well as the plan's historical experience and is similar to the disability assumption in the Connecticut State Teachers' Retirement System GASB 67 report as of June 30, 2014.

Marriage Assumption

Assumption: Percent of future retirees assumed to be married is included with the spouse medical plan election assumption. Males are assumed to be three years older than their spouses.

Retirees – Actual Data.

This assumption represents an estimate of future experience.

Rationale: This assumption is based on the provisions of the plan, the plan's historical experience and observations of similar populations and industries.

Benefit Assumptions

The Town of Guilford (the Town) provides its retired teachers and administrators with self-insured medical and prescription drug coverage with the Century Preferred Plan and Century Preferred Comprehensive Plan. As of July 1, 2017, the Century Preferred Comprehensive plan was replaced with Lumenos HSA plan for administrators and September 1, 2017 for teachers. For the claim cost calculations, we only used Century Preferred plan's premiums for teachers and administrators since most of the retirees are enrolled in this plan. For this reason, we did not value the Lumenos HSA plan which replaced the Century Preferred Comprehensive Plan. The July 1, 2016 through June 30, 2017 per capita costs were developed using premium equivalent rates calculated by Anthem. Please note that any over 65 participants in the plan are not eligible for Medicare benefits, therefore there is no reduction in costs once a participant attains age 65. Demographics provided by the Town of Guilford were used to reflect the average demographic distributions of lives for the plans. Factors based on Milliman's Health Cost Guidelines™ (HCGs) were then determined that would adjust the average age costs per life into per life costs over a range of ages, separately by gender and status (retiree and dependent). The HCGs are developed by Milliman health actuaries from an extensive amount of data, which is updated regularly. The cost models consider utilization and average charge levels for roughly 60 benefit categories, and can provide relative value factors in per capita plan costs between programs of different design, demographics, or geography.

July 1, 2016 through June 30, 2017 annual claim costs are shown below:

	Retiree		Spouse	
Age	Male	Female	Male	Female
55	13,453	14,441	10,376	11,716
60	16,108	15,932	12,765	13,130
64	19,974	18,132	16,007	14,767
65	19,639	18,986	19,639	18,986
70	23,855	22,179	23,855	22,179
75	28,219	25,666	28,219	25,666
80	32,260	29,194	32,260	29,194
85	36,569	32,988	36,569	32,988
90	40,482	36,388	40,482	36,388

Dental Plan

Retirees are eligible to receive dental coverage but are required to contribute 100% of the costs and we assumed no implicit subsidies, so this benefit was not valued.

Administrative Expenses

Administrative expenses are assumed to be included in the monthly premium equivalent rates for the medical and prescription drug plan.

Increase in Benefit Costs by Year ("Trend"):

The Society of Actuaries (SOA) developed and regularly updates a long-term medical trend model based on detailed research performed by a committee of economists and actuaries, which included a representative from Milliman. Milliman uses this model as the foundation for the trend that it recommends to our clients for postretirement medical valuations, with certain adjustments designed to produce trends that are appropriate for employer plans. These adjustments include incorporating assumed administrative cost trend where applicable and reflect the GASB45 methodology that requires removing the impact of age-related morbidity (since age-related morbidity assumptions are applied separately in the valuation when applicable).

Ultimate rates were determined considering historic and projected rates of real growth, long-term inflation and additional growth attributable to technology, and medical costs as a component of gross domestic product (GDP).

Adjustments have been made to reflect an anticipation of fees and surcharges effective in future calendar years, including fees associated with Patient-Centered Outcomes Research Trust Fund and insured plan fees, to the extent applicable as well as for the expectation of the excise tax on high cost health plans effective for plan years after 2019. This valuation reflects the *Consolidated Appropriations Act, 2016*, which waived the insured plan fees for 2017, and made changes to the implementation of the excise tax including delaying the tax until after 2019.

Years	Pre-Medicare/Medicare Trend
2016 - 2017	11.50%*
2017 - 2018	7.10%
2018 - 2019	11.60%
2019 - 2020	10.80%
2020 - 2021	6.20%
2021 – 2023	6.10%
2023 - 2025	6.00%
2025 - 2039	5.90%
2039 - 2040	5.80%
2040 - 2041	5.70%
2041 - 2043	5.60%
2043 - 2045	5.50%
2045 - 2049	5.40%

Years	Pre-Medicare/Medicare Trend
2049 - 2055	5.30%
2055 - 2062	5.20%
2062 - 2065	5.10%
2065 - 2066	5.00%
2066 - 2067	4.90%
2067 - 2068	4.80%
2068 - 2070	4.70%
2070 - 2071	4.60%
2071 - 2072	4.50%
2072 - 2074	4.40%
2074+	4.30%

*First year trend reflects actual July 1, 2017 through June 30, 2018 Century Preferred rates.

Contributions are projected to increase at the medical trend.

Coverage Elections

The benefit assumptions listed below represent estimate of future experience in the plan. They were developed based on the plan's experience and discussions with the plan sponsor. We believe they are reasonable for the contingencies they are measuring and are not anticipated to produce significant cumulative gains or losses over the measurement period.

Medical Plan

We have assumed that the Century Preferred Plan currently offered will continue in existence for teachers and the Century Preferred Comprehensive Plan will be replaced with the Lumenos HSA Plan effective September 1, 2017 for teachers and July 1, 2017 administrators. We assume these will be the only plans available. Administrators can only elect the Lumenos HSA plan effective July 1, 2017, we determined this is a small group and it was immaterial to value them in the Lumenos HSA plan. We assumed teacher and administrator future retirees elect the Century Preferred Plan.

Pre-65 Coverage Elections

We have assumed 85% of participants will elect medical coverage upon pre-65 retirement, including those participants who have opted out of medical coverage as active employees.

Post-65 Coverage Elections

We have assumed that 42.5% of active participants who were hired prior to January 1, 1986 will elect post-65 medical coverage supplied by the Town, including those participants who have opted out of medical coverage as active employees. We have assumed that 0% of participants who were hired on or subsequent to January 1, 1986 will elect post-65 medical coverage supplied by the Town. Participants hired after January 1, 1986 began paying into Medicare. Participants hired prior to January 1, 1986 do not pay into Medicare and do not get Medicare Part A free of charge. We assume 0% of spouses of current active participants will elect post-65 medical coverage; in the previous valuation, this was not assumed. This change in assumption is based on plan experience.

We have assumed that 7% of retired participants who are under age 65 will elect post-65 medical coverage supplied by the Town. This is based on the percentage of active participants hired prior to January 1, 1986.

Spousal Coverage

We received data on the covered spouses of retired members. For active members, we assumed 25% of future retirees who elect medical coverage will have a covered spouse at retirement.

Dependent Coverage

We assume the coverage for non-spouse dependents will not extend beyond the coverage for spouses.

Former Employees

No former employees who left employment with the Town prior to eligibility for retirement are assumed to receive benefits.

Surviving Spouse Coverage

We have assumed the coverage election is the same as Spousal Coverage above until age 65. Post-65 coverage election rate for surviving spouses is the same as the participant election rate.

Appendix B

Summary of Principal Plan Provisions

Our understanding of the program and provisions is summarized below. The administration of the program is not governed by this summary, but is governed by the documents and procedures adopted by the sponsor. If this description is inaccurate the results presented in this report may require revision.

Eligibility

Teachers and Administrators retiring from the Teachers Retirement Act.

Normal Retirement: Age 60 with 20 years of credited service in Connecticut, or 35 years of credited service including at least 25 years of service in Connecticut

Early Retirement: 25 years of credit service including 20 years of Connecticut service, or age 55 with 20 years of credited service including 15 years of Connecticut service, or age 60 with 10 years of credited service.

Disability Retirement: 5 years of credited service in Connecticut if not incurred in the performance of duty and no service requirement if incurred in the performance of duty.

Benefits

The retiree pays 100% of the premium less the state subsidy ($110.00 for member and $110.00 for spouse) which the Board receives quarterly from the State for medical coverage for either the lifetime of the employee and spouse (if not participating in Medicare) or until participating in Medicare. Surviving spouses are eligible to continue coverage upon death of the retiree by continuing to pay 100% of the premium less the state subsidy for medical coverage.

The retiree, spouse and surviving spouse can receive dental coverage by paying the full premium.

Summary of Medical Benefits

Century Preferred		
	In-Network	Out-Of-Network
Deductible		
Individual	N/A	$200
Two-Person	N/A	$400
Family	N/A	$500
Annual Out-of-Pocket Maximum		
Individual	$6,600	$1,000
Two-Person	N/A	$2,000
Family	$13,200	$2,500
Office Visits	$25	20% Coinsurance
Emergency Room Copay	$125	$125
Hospital Inpatient	$250	20% Coinsurance
Prescription Drugs - Retail*	$5 / $25 / $40 / $40	20% Coinsurance
Prescription Drugs - Mail Order* (Maintenance Drugs)	$10 / $50 / $80 / $80	20% Coinsurance

*Generic / Preferred Brand / Non-Preferred Brand / Specialty

Century Preferred Comprehensive		
	In-Network	**Out-Of-Network**
Deductible		
Individual	$200	
Two-Person	$400	
Family	$600	
Annual Out-of-Pocket Maximum		
Individual	$1,000	
Two-Person	$2,000	
Family	$3,000	
Prescription Drugs - Retail*	$5 / $25 / $40 / $40	20% Coinsurance
Prescription Drugs - Mail Order* (Maintenance Drugs)	$10 / $50 / $80 / $80	20% Coinsurance
All non-Rx Services	20% Coinsurance	40% Coinsurance

*Generic / Preferred Brand / Non-Preferred Brand / Specialty

Lumenos HSA Plan	
Deductible	
Individual	$2,000 In and Out of network combined.
Family	$4,000 In and Out of network combined.
Annual Out-of-Pocket Maximum	
Individual	$3,000 In network only, $4,000 In and Out of network combined.
Family	$6,000 In network only, $8,000 In and Out of network combined.

Appendix C

Summary of Census Data

Summary of Participant Data as of July 1, 2016

Number of members	Total
Active	346
Retired members	32
Spouses of retirees*	8
Total	386

Average age	Total
Active	45.8
Retired	67.7

Expected Lifetime	Total
Active [to retirement]	15.5
Retired [lifetime]	20.4

Number of Active Participants by Age and Service Groups

Years of Service

Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Total
0-24	4	1	-	-	-	-	-	-	-	-	5
25-29	2	18	1	-	-	-	-	-	-	-	21
30-34	2	28	12	5	-	-	-	-	-	-	47
35-39	1	17	17	24	4	-	-	-	-	-	63
40-44	3	11	5	14	5	-	-	-	-	-	38
45-49	1	8	11	9	13	1	-	-	-	-	43
50-54	-	4	6	7	5	1	4	1	-	-	28
55-59	-	2	6	17	9	2	3	4	-	-	43
60-64	-	1	4	4	11	7	2	2	6	1	38
65-69	-	-	1	-	5	5	3	1	-	5	20
70&Up	-	-	-	-	-	-	-	-	-	-	-
Total	13	90	63	80	52	16	12	8	6	6	346
% Male											23%

Number of Retired Participants
By Age

Age	Retirees	Spouses
0-24	-	-
25-29	-	-
30-34	-	-
35-39	-	-
40-44	-	-
45-49	-	-
50-54	-	-
55-59	-	-
60-64	16	8
65-69	7	-
70-74	5	-
75-79	3	-
80&Up	1	-
Total	32	8
% Male	12%	75%