



TOWN OF WEST HARTFORD OTHER POST-EMPLOYMENT BENEFITS PROGRAM

July 1, 2013 Actuarial Valuation

Prepared by
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Certification

We have performed an actuarial valuation of the Town of West Hartford Other Post-Employment Benefits Program as of July 1, 2013. The results of this valuation, along with supporting data, are set forth in the following report.

Milliman has prepared this report in compliance with Government Accounting Standard No. 45. 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 purposes other than meeting accounting requirements.

In preparing this report, we relied on employee census data, asset information, claims and premium information as of the valuation date, furnished by the Town of West Hartford. 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 financial 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.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate, all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices, and the methods and assumptions produced results which are reasonable. 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. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

The actuarial method and assumptions used in this valuation are discussed on pages 18-23 of this report. A summary of the plan provisions starts on page 24 of this report.

Milliman's work is prepared solely for the internal business use of the Town of West Hartford. 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 of West Hartford may provide a copy of Milliman's work, in its entirety, to the Town of West Hartford'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 of West Hartford; and (b) The Town of West Hartford may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

Certification

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.

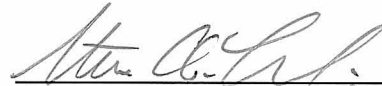
The consultants who worked on this assignment are pension and health actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

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.

June 9, 2014



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Discussion of Experience

This valuation reflects a number of changes relative to the July 1, 2011 valuation:

Demographic Changes from 2011 to 2013

From July 1, 2011 to July 1, 2013, the overall membership decreased from 2,926 to 2,646. The total number of active members decreased from 1,360 to 1,345 and the total number of retirees and spouses of retirees decreased from 1,566 to 1,301.

The average age of active members stayed the same at 45.8 and the average age of retired members decreased from 72.2 to 69.8.

Assumption Changes

Discount Rate: We changed the discount rate to 7.75% for all participants. The prior valuation used a 7.50% discount rate for retirees and employees hired prior to plan changes who were to have had their benefits paid through the Town's retiree medical reserve fund. An 8.50% discount rate was used for employees hired after plan changes who were to have had their benefits paid through the Town's OPEB trust. Hence forth, the Town is planning to fund all benefits for all participants through the OPEB trust.

Medical and dental claims costs: We updated the medical and dental claims costs with respect to expected claims costs, based on our analysis of the claims experience and premium information provided to us for this valuation.

Medical inflation: The medical cost inflation trend used in this valuation was derived from the "Getzen Model" established by the Society of Actuaries for developing long term medical cost trends. The Getzen Model was subsequently updated to reflect the latest economic growth factors and an adjustment was made to reflect the value of the expected excise tax payable in 2018 and later. This assumption was revised to an initial inflation rate of 6.80%, grading down to an ultimate inflation rate of 4.70% over a period of 72 years (Prior valuation: an initial inflation rate of 5.80% graded down to an ultimate inflation rate of 4.40% over a period of 50 years).

Teachers and Administrators: Certain actuarial demographic assumptions for Teachers and Administrators are based on the assumptions used in the June 30, 2012 valuation of the Connecticut State Teachers Retirement System by Cavanaugh Macdonald Consulting, LLC. Our valuation reflects the applicable assumption changes made in their June 30, 2012 valuation.

Healthy Mortality: We updated the Healthy Mortality assumption for All Others to the RP-2000 Annuitant and Non-Annuitant Mortality Table for males and females projected to 2020 per Scale AA (Prior valuation: RP-2000 Combined Healthy Mortality Table projected to 2020 by Scale AA).

The effect of the above changes was as follows: (1) changing the discount rate from a blended 7.50%/8.50% to 7.75% decreased the Accrued Liability by about \$3 million and decreased the Annual Required Contribution by about \$50,000 and (2) updating the other assumptions increased the Accrued Liability by about \$280,000 and increased the Annual Required Contribution by about \$20,000.

Overview of GASB 43 and GASB 45

GASB 43 requires OPEB plans to disclose information about asset and liability levels and show historical contribution information. GASB 43 only applies in situations where a separate trust is established to prefund these benefits. GASB 45 requires employers to perform periodic actuarial valuations to determine annual accounting costs, and to keep a running tally of the extent to which these amounts are over or under funded. GASB 43 was effective starting in FY 2006-07 for a Phase I government, FY 2007-08 for a Phase II government, and FY 2008-09 for a Phase III government. GASB 45 was effective for the fiscal year following implementation of GASB 43.

GASB 43 and 45 apply to just about any benefit that is provided after retirement except for pension benefits: medical insurance, dental, vision, and hearing benefits plus life insurance and long term care insurance. The benefits provided by the Town to retirees include medical and dental insurance plus life insurance. The philosophy driving the accounting standard is that these post-employment benefits are part of the compensation that is paid to employees in return for their services, and the cost of these benefits should be recognized while the employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 43 and 45 extend the same thinking to all other post-employment benefits.

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 inflation 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 two pieces:

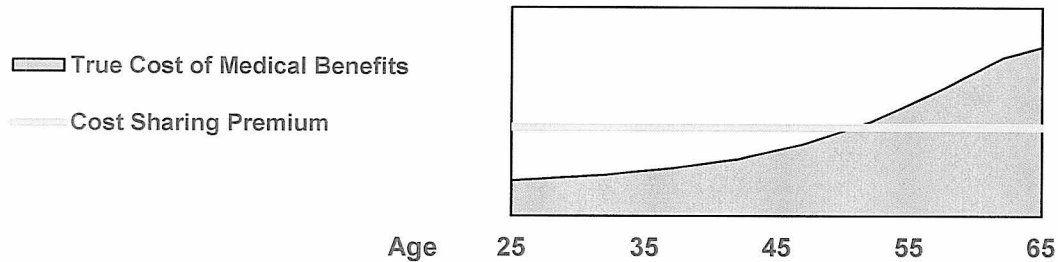
- Normal Cost – because the benefits earned each year should be paid for each year
- Past Service Cost – a catch-up payment to fund the Accrued Liability over time.

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 43 and 45 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 as of July 1, 2013

We have calculated the Accrued Liability separately for five 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.

	BOE Non- Certified Pre	BOE Non- Certified Post	BOE Certified	Town Pre	Town Post	Total
Current active members						
Employees under age 65	\$1,925,615	\$100,985	\$4,063,846	\$6,123,684	\$142,428	\$12,356,558
Employees over age 65	5,386,621	409,141	0	6,361,872	221,099	12,378,733
Dependents under age 65	814,758	51,799	2,079,454	3,124,983	80,497	6,151,491
Dependents over age 65	<u>842,660</u>	<u>65,291</u>	<u>0</u>	<u>1,822,606</u>	<u>63,864</u>	<u>2,794,421</u>
Total	8,969,654	627,216	6,143,300	17,433,145	507,888	33,681,203
Current retired members						
Employees under age 65	1,621,818	0	1,124,417	13,036,917	0	15,783,152
Employees over age 65	8,258,160	0	5,839,602	29,098,565	0	43,196,327
Dependents under age 65	438,940	0	660,337	11,040,780	0	12,140,057
Dependents over age 65	<u>1,479,936</u>	<u>0</u>	<u>400,670</u>	<u>12,183,561</u>	<u>0</u>	<u>14,064,167</u>
Total	11,798,854	0	8,025,026	65,359,823	0	85,183,703
Total Accrued Liability	20,768,508	627,216	14,168,326	82,792,968	507,888	118,864,906

Annual Required Contribution

The Annual Required Contribution (ARC) for the OPEB program consists of two pieces: a **Normal Cost** (the cost of benefits earned each year should be accrued in that year) plus a **Past Service Cost** (a catch-up accrual to amortize the Unfunded Accrued Liability).

The amortization period is 30 years starting in 2007. The amortization method produces annual payments that will increase by 4.00% annually. On this basis, the ARC is determined as follows:

	BOE Non-Certified Pre	BOE Non-Certified Post	BOE Certified	Town Pre	Town Post	Total
Accrued Liability	\$20,768,508	\$627,216	\$14,168,326	\$82,792,968	\$507,888	\$118,864,906
Assets	0	101,096	0	0	81,862	182,958
Unfunded Accrued Liability	20,768,508	526,120	14,168,326	82,792,968	426,026	118,681,948
Amortization Period	24	24	24	24	24	24
Payroll Growth Rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Past Service Cost	1,262,209	31,975	861,082	5,031,755	25,892	7,212,913
 Total Normal Cost	 538,671	 103,375	 461,149	 943,725	 129,166	 2,176,086
Employee Contributions	0	0	0	185,579	126,899	312,478
Expenses	0	0	0	0	0	0
Net Normal Cost	538,671	103,375	461,149	758,146	2,267	1,863,608
 Interest	 139,568	 10,490	 102,473	 448,717	 2,182	 703,430
 ARC for FY 2015	 1,940,448	 145,840	 1,424,704	 6,238,618	 30,341	 9,779,951
 Expected Benefit Payouts	 1,297,454	 0	 1,033,555	 5,858,960	 0	 8,189,969
 Net Budget Impact	 642,994	 145,840	 391,149	 379,658	 30,341	 1,589,982
 Phase-In Percentage*	 20%	 20%	 20%	 20%	 20%	 20%
 Actual Contribution to Trust	 128,599	 29,168	 78,230	 75,932	 6,068	 317,997

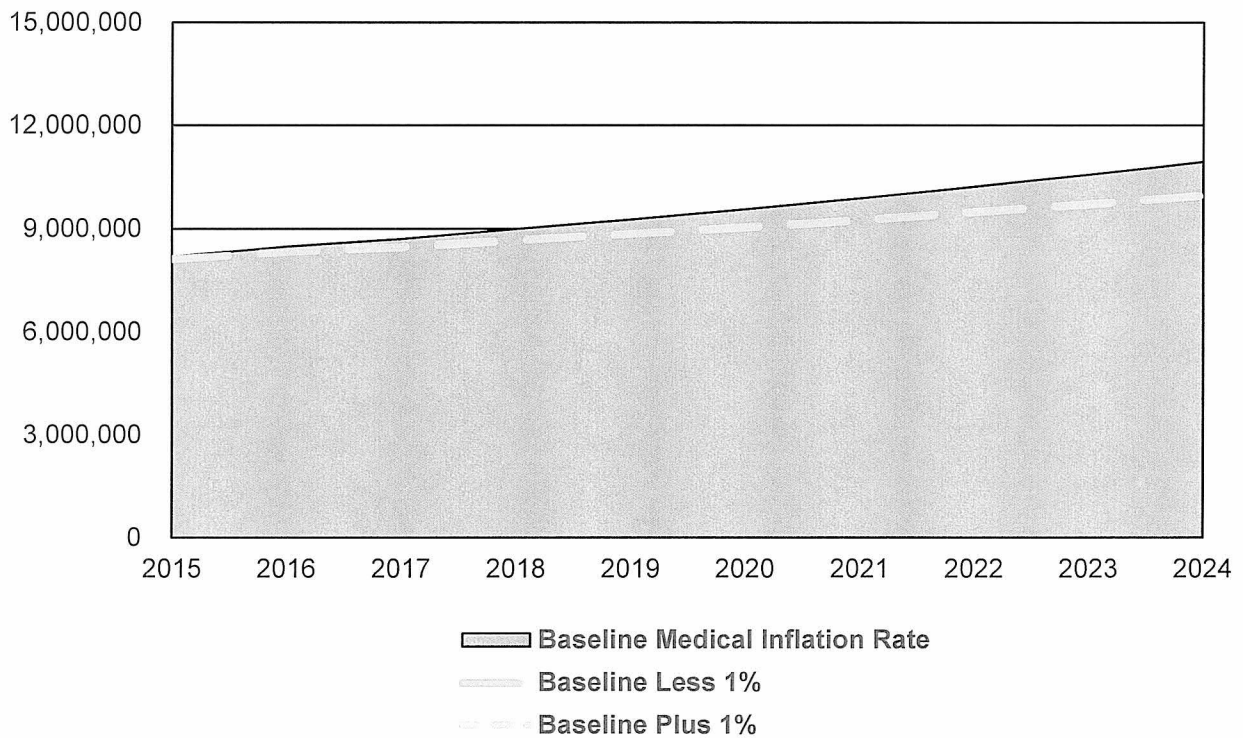
The ARC is assumed to be paid at the beginning of the Fiscal Year.

* The Town is planning to phase-in full OPEB prefunding over a five year period.

Projected Payouts

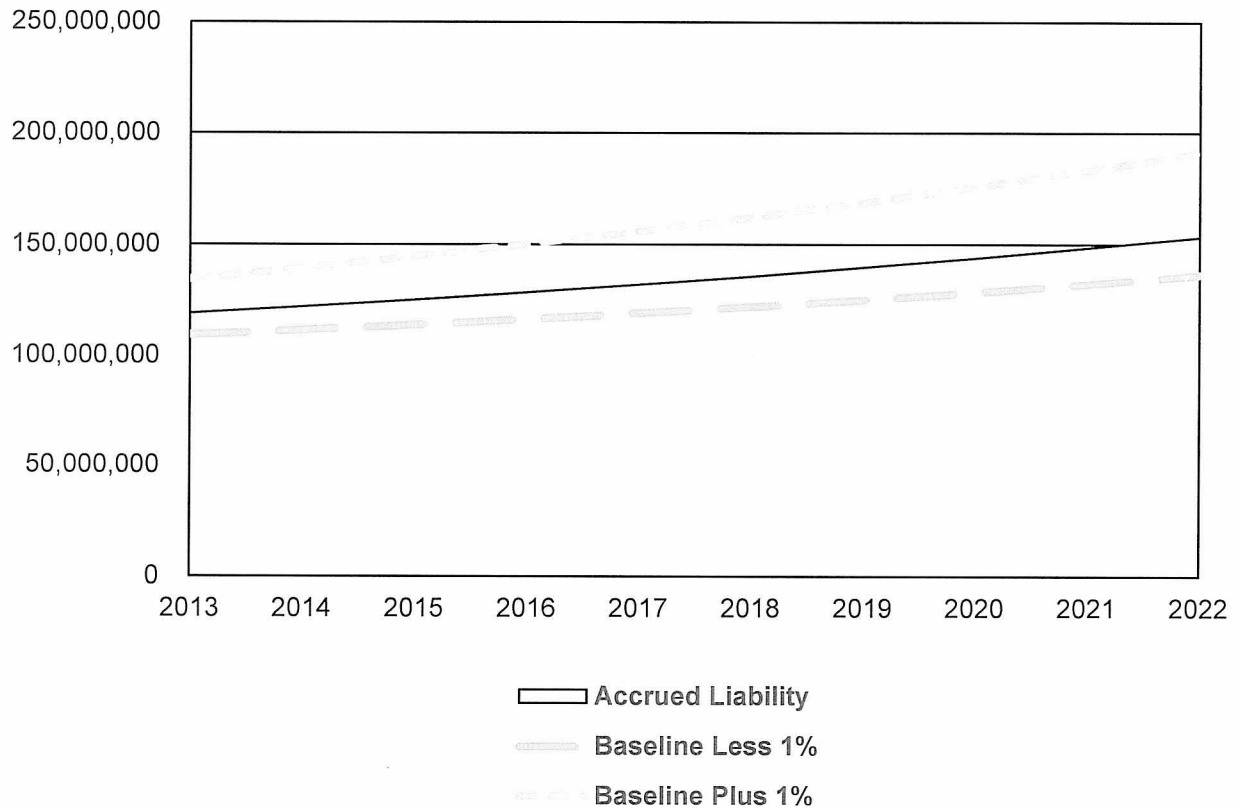
The table and graph below show the expected annual payments for OPEB benefits for the next 10 years.

Fiscal Year	Baseline Less 1%	Baseline Medical Inflation Rate	Baseline Plus 1%
2015	\$8,113,284	\$8,189,969	\$8,266,654
2016	8,329,322	8,488,127	8,648,431
2017	8,465,034	8,708,817	8,957,236
2018	8,664,708	8,999,383	9,343,660
2019	8,844,855	9,274,228	9,720,117
2020	9,035,199	9,564,297	10,118,969
2021	9,251,243	9,886,527	10,558,843
2022	9,477,612	10,225,177	11,023,840
2023	9,706,530	10,572,172	11,505,769
2024	9,952,585	10,943,707	12,022,792



Projected Liabilities

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



GASB 45 Schedule of Funding Progress

The following information is required to be disclosed in the Town's financial statement.

(\$ 000s)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Accrued Liability (b)	Unfunded Accrued Liability (UAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/2007	\$0	\$85,496	\$85,496	0%	N/A	N/A
7/1/2009	20	89,038	89,018	0.02%	N/A	N/A
7/1/2011	80	107,490	107,410	0.07%	N/A	N/A
7/1/2013	183	118,865	118,682	0.15%	N/A	N/A

GASB 45 Schedule of Employer Contributions

The following information is required to be disclosed in the Town's financial statement.

(\$ 000s)

Year Ended June 30	Annual Required Contribution	Actual Contribution Made	Percentage Contributed
2008	\$6,274	\$5,476	87.3%
2009	6,658	5,910	88.8%
2010	7,062	6,400	90.6%
2011	6,979	6,381	91.4%
2012	7,318	6,450	88.1%
2013	8,506	7,381	86.8%
2014	9,780	N/A	N/A

Summary of Census Data

The following were included in our analysis based on information provided as of July 1, 2013 by the Town.

	BOE Non-Certified Pre	BOE Non-Certified Post	BOE Certified	Town Pre	Town Post	Total
Number of members						
Active	140	38	791	249	127	1,345
Retired members	146	0	100	564	0	810
Spouses of retirees	73	0	58	360	0	491
Total	359	38	949	1,173	127	2,646
Average age						
Active	54.7	46.0	44.9	48.5	36.9	45.8
Retired members	75.1	0.0	66.2	69.1	0.0	69.8
Average retirement age						
Active	63.0	61.0	60.4	57.2	56.5	59.7
Retired	61.1	0.0	58.9	61.6	0.0	61.2
Expected lifetime						
Active [to retirement]	8.3	15.0	15.6	8.7	19.6	13.9
Retired [lifetime]	13.8	0.0	21.6	16.9	0.0	16.9

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:

2013 - 2014 Monthly Premiums		Employee	Spouse
Town, Police and Fire*	Pre 65	\$824.69	\$786.57
	Post 65	355.58	349.83
Board of Ed. Century Preferred			
Teachers & Nurses	Pre 65	592.72	694.41
Custodians, Maintenance & Secretaries	Pre 65	604.40	707.19
Administrators	Pre 65	608.77	712.26
Professional-Technical	Pre 65	614.78	719.28
Board of Ed. BlueCare			
Teachers & Nurses	Pre 65	567.66	664.96
Custodians, Maintenance & Secretaries	Pre 65	579.01	677.37
Administrators	Pre 65	581.77	680.60
Professional-Technical	Pre 65	587.53	687.33
Board of Ed. Century Preferred	Post 65	414.16	484.60
Board of Ed. BlueCare	Post 65	373.24	436.69
Board of Ed. Healthnet	Post 65	277.85	277.85
Board of Ed. BCBS High Option	Post 65	503.48	503.48
Board of Ed. Plan F	Post 65	545.39	545.39
Health Savings Account	Pre 65	490.32	573.69

* A few retirees have slightly different premium rates

Health Cost Adjustment Factors

Milliman's Health Cost Guidelines were used to develop the expected relationship of the true cost of health benefits across age and gender. Representative factors are shown below.

Age	Town - Medical Male		Town - Medical Female	
	Employee	Spouse	Employee	Spouse
40	3.06%	3.20%	1.08%	2.18%
45	-4.32%	2.41%	-3.10%	2.05%
50	-1.36%	3.77%	-2.32%	2.14%
55	3.08%	3.44%	1.08%	2.27%
60	4.92%	4.77%	3.65%	3.44%
65	2.94%	2.94%	2.77%	2.77%
70	2.94%	2.94%	2.77%	2.77%
75	2.21%	2.21%	2.01%	2.01%
80	1.42%	1.42%	1.26%	1.26%

Age	BOE Non-Medicare Male		BOE Non-Medicare Female	
	Employee	Spouse	Employee	Spouse
40	3.06%	3.20%	1.08%	2.18%
45	-4.32%	2.41%	-3.10%	2.05%
50	-1.36%	3.77%	-2.32%	2.14%
55	3.08%	3.44%	1.08%	2.27%
60	4.92%	4.77%	3.65%	3.44%
65	4.08%	4.08%	3.64%	3.64%
70	4.08%	4.08%	3.64%	3.64%
75	3.85%	3.85%	3.39%	3.39%
80	2.81%	2.81%	2.72%	2.72%

Age	BOE Medicare Male		BOE Medicare Female	
	Employee	Spouse	Employee	Spouse
40	3.06%	3.20%	1.08%	2.18%
45	-4.32%	2.41%	-3.10%	2.05%
50	-1.36%	3.77%	-2.32%	2.14%
55	3.08%	3.44%	1.08%	2.27%
60	4.92%	4.77%	3.65%	3.44%
65	2.94%	2.94%	2.77%	2.77%
70	2.94%	2.94%	2.77%	2.77%
75	2.21%	2.21%	2.01%	2.01%
80	1.42%	1.42%	1.26%	1.26%

Glossary

The following is an explanation of many of the terms referenced by the Statement of the Governmental Accounting Standards Board, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

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 – Unit Credit, Entry Age Normal, Attained Age, Aggregate, Frozen Entry Age, and Frozen Attained Age.

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 or the Unfunded Frozen 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.

Annual Required Contribution ("ARC") - This is the employer's periodic required contribution to a defined benefit OPEB plan, calculated in accordance with the set of requirements for calculating actuarially determined OPEB information included in financial reports.

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 45 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 would be based on the expected return of the employer's general funds.

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

Health Cost Trend - This is the rate at which health costs are assumed to increase over time.

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.

Net OPEB Obligation - This is the cumulative difference since the effective date of this statement between the annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

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.

Unfunded Actuarial 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 **Projected Unit Credit Cost Method**. Recommended annual contributions consist of two pieces: Normal Cost plus a payment towards the Unfunded Accrued Liability.

The **Accrued Liability** is determined directly as the present value of benefits accrued to date, where the accrued benefit for each Member is the pro-rata portion (based on service to date) of the **projected** benefit payable at death, disability, retirement or termination.

The **Normal Cost** is similarly determined as the present value of the portion of the **projected** benefit attributable to the current year.

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

Actuarial Assumptions

Amortization Growth Rate 4.00%

Healthy Mortality

Teachers*: RP-2000 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 Annuitant and Non-Annuitant Mortality Tables projected to 2020 by Scale AA. (Prior valuation: RP-2000 Combined Healthy Mortality Table projected to 2020 by Scale AA.) A Blue Collar adjustment is applied pre-retirement for active members of the Custodians, Maintenance, Grounds, Building Maintenance, and Streets groups, and both pre- and post-retirement for Fire and Police members. This assumption incorporates a provision for improvements in longevity beyond the valuation date.

Disabled Mortality

Teachers*: RP-2000 projected forward 19 years using scale AA, with an eight-year age set forward for males and females. This assumption includes a margin for mortality improvement beyond the valuation date.

All Others: RP-2000 Disabled Mortality Table projected to 2020 by Scale AA. This assumption includes a margin for mortality improvement beyond the valuation date.

Turnover

Teachers*: rates based on gender and length of service for the first ten years and gender and age thereafter:

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% (PV: 3.36%)	1.60%

Fire: None.

Police: Crocker-Sarason Table T-1

Actuarial Assumptions

Turnover (continued)

All Others: Rates based on length of service and age per the following:

Age	0-2	3-5	6-9	10+
20	30%	12%	8%	6%
25	25%	11%	7%	5%
30	20%	10%	6%	4%
35	15%	9%	5%	3%
40+	10%	8%	4%	2%

Retirement

Rates based on age, eligibility for pension benefits, and group:

Teachers*:

Current:

Age	Unreduced		Proratable		Reduced	
	Male	Female	Male	Female	Male	Female
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%		

Actuarial Assumptions

Retirement (continued) Teachers*:

Prior:

Age	Unreduced		Proratable		Reduced	
	Male	Female	Male	Female	Male	Female
50 – 51	27.50%	15.00%			2.00%	2.00%
52	27.50%	15.00%			3.00%	4.00%
53	27.50%	15.00%			3.00%	4.50%
54	27.50%	15.00%			5.00%	5.50%
55	38.50%	30.00%			5.00%	7.50%
56	38.50%	30.00%			7.00%	8.50%
57	38.50%	30.00%			10.00%	9.50%
58	38.50%	30.00%			11.00%	10.00%
59	38.50%	30.00%			12.00%	10.00%
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%		

Fire:

Reduced pension, no medical	0%
Unreduced pension, no medical	0%
Unreduced pension and medical	25%
All other ages:	
40-44	1%
45-49	5%
50-55	20%
56-64	10%
65	15%

Actuarial Assumptions

Retirement (continued) Police:

Reduced pension, no medical	0%
Unreduced pension, no medical	0%
Unreduced pension and medical	25%
All other ages:	
30-39	1%
40-44	2%
45-54	10%
55-61	20%
62	100%

All Others:

Reduced pension, no medical	5%
Unreduced pension, no medical	5%
Unreduced pension and medical	15%
All other ages:	
45-49	1%
50-54	3%
55-59	5%
60	15%
61-64	10%
65-69	40%
70	100%

Disability

Rates (per 1000 lives) based on age, gender, and group:

Teachers*	Age	Male	Female
	20	0.05	0.05
	30	0.05	0.04
	40	0.07	0.07
	50	0.33	0.26
	60	1.28	0.50
 All Others	 Age	 Rate	
	20	0.75	
	30	0.97	
	40	1.70	
	50	5.09	
	60	14.42	

Actuarial Assumptions

Retiree Coverage	<p>The following percentages of future retirees are assumed to elect coverage under the Town's benefit program:</p> <table> <tr> <td>Teachers and Administrators</td><td style="text-align: right;">95%</td></tr> <tr> <td>Police and Fire</td><td style="text-align: right;">100%</td></tr> <tr> <td>All Others</td><td style="text-align: right;">95%</td></tr> </table>	Teachers and Administrators	95%	Police and Fire	100%	All Others	95%								
Teachers and Administrators	95%														
Police and Fire	100%														
All Others	95%														
Dependent Coverage	<p>For active members, we assumed that females are three years younger than males.</p> <table> <tr> <td>Teachers*</td><td>85% of males and 75% of females are assumed to have covered dependents at retirement and to elect dependent coverage.</td></tr> <tr> <td>All Others</td><td>80% of males and 65% of females are assumed to have a spouse. Those with a spouse are assumed to elect dependent coverage according to the following rates:</td></tr> <tr> <td>Police and Fire</td><td style="text-align: right;">60%</td></tr> <tr> <td>All Other Town Groups</td><td style="text-align: right;">60%</td></tr> <tr> <td>Nurses</td><td style="text-align: right;">63%</td></tr> <tr> <td>Secretarial</td><td style="text-align: right;">58%</td></tr> <tr> <td>All Other BOE Groups</td><td style="text-align: right;">73%</td></tr> </table>	Teachers*	85% of males and 75% of females are assumed to have covered dependents at retirement and to elect dependent coverage.	All Others	80% of males and 65% of females are assumed to have a spouse. Those with a spouse are assumed to elect dependent coverage according to the following rates:	Police and Fire	60%	All Other Town Groups	60%	Nurses	63%	Secretarial	58%	All Other BOE Groups	73%
Teachers*	85% of males and 75% of females are assumed to have covered dependents at retirement and to elect dependent coverage.														
All Others	80% of males and 65% of females are assumed to have a spouse. Those with a spouse are assumed to elect dependent coverage according to the following rates:														
Police and Fire	60%														
All Other Town Groups	60%														
Nurses	63%														
Secretarial	58%														
All Other BOE Groups	73%														
Cost Blending	<p>In order to dampen the volatility of the premium changes, this valuation is based on 75% of expected costs/premiums plus 25% of actual costs/premiums.</p>														

* Certain actuarial demographic assumptions for Teachers and Administrators are based on the assumptions used in the June 30, 2012 valuation of the Connecticut State Teachers Retirement System by Cavanaugh, Macdonald Consulting, LLC.

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.

Police (60) and Fire (61)

Eligibility Normal Retirement: Earliest of 20 years of Credited Service, or age 55 with 10 years of Credited Service, or age 65. For Firefighters hired after July 1, 2005, age 50 with 25 years of service.

Early Retirement: 10 years of Credited Service.

Premium Sharing Date of hire prior to July 1, 1986:

10-15 years of service: Town pays greater of rate in effect on July 1st after retirement or 50% of the premium.

15-20 years of service: Town pays greater of rate in effect on July 1st after retirement or 75% of the premium.

20+ years of service: Town pays 100% of the premium.

Fire employees with date of hire July 1, 1986 to July 1, 2005:

Less than 20 years of service: no coverage

20+ years of service: Town pays 100% of the premium.

Fire employees with date of hire on or after July 1, 2005:

Less than 25 years of service: no coverage

25+ years of service, age 50: Town pays 100% of the premium.

Police employees with date of hire July 1, 1986 to July 1, 2006:

Less than 20 years of service: no coverage

20+ years of service: Town pays 100% of the premium.

Police employees with date of hire on or after July 1, 2006:

Less than 25 years of service: no coverage

25+ years of service: Town pays 100% of the premium.

Member Contributions Effective October 2, 2000, active Police employees pay 1% of bi-weekly base wage toward the cost of retiree health benefits.

Effective July 15, 2002, active Fire employees pay 1% of bi-weekly base wage toward the cost of retiree health benefits.

Effective July 1, 2005, active Police and Fire employees pay 1.65% of bi-weekly base wage toward the cost of retiree health benefits.

Summary of Plan Provisions

Town Employees

Eligibility Streets Union (62)

Date of hire before July 1, 2003:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, age 70 or any age with 30 years of Credited Service.

Early Retirement: Earlier of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after July 1, 2003:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 70 or any age with 35 years of Credited Service.

Early Retirement: Earlier of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Dispatchers Union (64)

Date of hire before July 1, 2007:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, age 70 or any age with 20 years of Credited Service.

Early Retirement: Earliest of age 45 with 15 years of Credited Service, age 50 with 10 years of Credited Service or any age with 20 years of Credited Service.

Date of hire on or after July 1, 2007:

Normal Retirement: Earliest of age 70 or any age with 25 years of Credited Service.

Early Retirement: Earlier of age 55 with 15 years of Credited Service, age 60 with 10 years of Credited Service or any age with 20 years of Credited Service.

Summary of Plan Provisions

Town Employees

Eligibility **Grounds Union (70), Building Maintenance Union (71) and Supervisor Union (74)**

Date of hire before July 1, 2003:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, age 70 or any age with 30 years of Credited Service.

Early Retirement: Earlier of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after July 1, 2003:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Early Retirement: Earlier of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Nurses Union (58), Directors (59), Clerical Union (65), Non-Bargaining Clerical (66), Non-Bargaining Unit (68), Professional/Management Union (73), Seasonal Part Time (79), Non-Bargaining Corporate Counsel Management (87) and Town Manager

Date of hire before July 1, 2003:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service or age 70.

Early Retirement: Earliest of age 45 with 15 years of Credited Service, age 50 with 10 years of Credited Service.

Date of hire on or after July 1, 2003:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Early Retirement: Earlier of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Summary of Plan Provisions

Town Employees

Premium Sharing Date of hire prior to July 1, 1986 who receive either an early or normal retirement pension benefit: Town pays 100% of premium.

Date of hire after July 1, 1986 and prior to November 10, 1997 who receive a normal retirement pension benefit: Town pays 93% of the premium until Medicare eligibility, then Town pays 100%.

Date of hire after November 10, 1997 and prior to June 30, 2003 who receive a normal retirement pension benefit with eligibility at age 55 and 25 years of service: Town pays 85% of the premium until Medicare eligibility, then Town pays 100%.

Date of hire after November 10, 1997 and prior to June 30, 2003 who receive a normal retirement pension benefit with eligibility at age 60 and 10 years of service: Town pays 70% of the premium until Medicare eligibility, then Town pays 100%.

Date of hire after July 1, 2003 (July 1, 2007 for Dispatchers Union) who receive a normal retirement pension benefit with eligibility at age 65 with 15 years of service or age 62 with 35 years of service: Town pays 75% of the premium for employee and 50% of the premium for dependent until Medicare eligibility, then Town pays 100%.

Summary of Plan Provisions

Board of Education

Eligibility Teachers and Administrators

A Teacher or Administrator retiring under the Connecticut State Teachers Retirement System 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.

Secretarial/Clerical (02)

Date of hire before May 1, 2006:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service or age 70.

Early Retirement: Earliest of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after May 1, 2006:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Early Retirement: Earliest of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Custodial Union (05)

Date of hire before January 1, 2006:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, age 70 or any age with 30 years of Credited Service.

Early Retirement: Earliest of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after January 1, 2006:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 70 or any age with 35 years of Credited Service.

Early Retirement: Earliest of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Summary of Plan Provisions

Board of Education

Eligibility Maintenance Union (06)

Date of hire before July 1, 2004:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, age 70 or any age with 30 years of Credited Service.

Early Retirement: Earliest of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after July 1, 2004:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 70 or any age with 35 years of Credited Service.

Early Retirement: Earliest of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Nurses Union (07)

Date of hire before July 1, 2004:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service or age 70.

Early Retirement: Earliest of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after July 1, 2004:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Early Retirement: Earliest of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Summary of Plan Provisions

Board of Education

Eligibility Non-Bargaining Union (09)

Date of hire before July 1, 2006:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service or age 70.

Early Retirement: Earliest of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service

Date of hire on or after July 1, 2006:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Early Retirement: Earliest of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Custodial III Union (10)

Date of hire before July 1, 2005:

Normal Retirement: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service or age 70.

Early Retirement: Earliest of age 45 with 15 years of Credited Service or age 50 with 10 years of Credited Service.

Date of hire on or after July 1, 2005:

Normal Retirement: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Early Retirement: Earliest of age 55 with 15 years of Credited Service or age 60 with 10 years of Credited Service.

Printers Union (04), Paraprofessional (03), Security (12) and Cafeteria Union (08)

Not eligible for OPEB.

Summary of Plan Provisions

Board of Education

Premium Sharing Teachers and Administrators:

Employee pays 100% of the premium for employee and dependent.

Secretarial/Clerical (02) and Non-Bargaining Union (09):

Board pays 100% of the premium for employee and 50% of the premium for dependent.

Maintenance Union (06), Custodial Union (05) and Custodial III Union (10):

Pre-65, Board pays 100% of the premium for employee and 50% of the premium for dependent. Post-65, the employee pays 100% of the Major Medical premium for both employee and dependent. The Board pays 100% of the premium for the employee and 50% of the premium for dependent for the Over 65 portion.

Nurses Union (07):

Board pays 50% of the premium for employee and dependent.

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, the Town's personnel rules and the benefits being currently provided to retired members. Many current retired members have different cost sharing provisions. 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.