



TOWN OF WEST HARTFORD

GASB 45 VALUATION REPORT

AS OF JULY 1, 2015

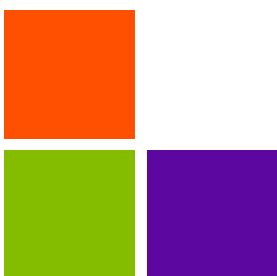




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Actuarial Certification

This report presents the results of the July 1, 2015 Actuarial Valuation for the Town of West Hartford post-retirement benefit other than pension (OPEB) for Town and Board of Education Employees (the Plan) for the purpose of estimating the funded status of the Plan and determining the Annual Required Contribution (ARC) for the fiscal years ending June 30, 2016, June 30, 2017 and June 30, 2018. This report is intended to satisfy the requirements of Connecticut General Statute 7-450a. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Town. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increase or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in the retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Evan W. Woollacott, Jr., FCA, MAAA
Enrolled Actuary 14-005126

September 20, 2016



Executive Summary

The July 1, 2015 accrued liability of \$147,594,000 is higher than anticipated. The additional liability is primarily due to morbidity and changes in census data and plan provisions. The changes in assumptions include payroll growth rate, medical trend and a reduction in discount rate from 7.75% to 7.50%. In addition, the actuarial cost method was changed to Entry Age Normal. The cost method change was made to assist with the implementation of GASB 74/75. In total, these assumptions and method changes increased the liability by approximately 2.2%.

Below is a history of the Actuarial Accrued Liability (AAL) and Annual Required Contribution (ARC):

Schedule of Funding Status and Funding Progress						
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
7/1/2009	\$0	\$89,038,000	\$89,038,000	0.00%	N/A	N/A
7/1/2011	80,000	107,490,000	107,410,000	0.07%	N/A	N/A
7/1/2013	183,000	118,865,000	118,682,000	0.15%	N/A	N/A
7/1/2015	702,000	147,594,000	146,892,000	0.48%	105,853,000	139%

History of Annual Required Contribution (ARC)	
Year Ended June 30	Annual Required Contribution (ARC)
2012	\$7,318,000
2013	8,506,000
2014	8,999,000
2015	9,780,000
2016	11,981,000
2017	12,689,000



Unfunded Actuarial Accrued Liability

GASB 45 Unfunded Actuarial Accrued Liability (UAAL)					
Actuarial Accrued Liability (AAL) 7/1/2015	Police & Fire	Town	Certified	Non-Certified	Grand Total
Actives	\$19,533,000	\$11,396,000	\$4,678,000	\$10,897,000	\$46,504,000
Retirees	<u>47,979,000</u>	<u>30,396,000</u>	<u>9,316,000</u>	<u>13,399,000</u>	<u>101,090,000</u>
Total	67,512,000	41,792,000	13,994,000	24,296,000	147,594,000
Assets 7/1/2015	<u>321,000</u>	<u>198,000</u>	<u>67,000</u>	<u>116,000</u>	<u>702,000</u>
Unfunded Actuarial Accrued Liability (UAAL) 7/1/2015	67,191,000	41,594,000	13,927,000	24,180,000	146,892,000



Annual Required Contribution

GASB 45 Annual Required Contribution (ARC)					
Annual Required Contribution (ARC)					Grand
2015 / 2016 Fiscal Year	Police & Fire	Town	Certified	Non-Certified	Total
Normal Cost	\$1,203,000	\$391,000	\$224,000	\$349,000	\$2,167,000
30 Year Amortization of UAAL	4,110,000	2,544,000	852,000	1,479,000	8,985,000
Interest - Mid Year Payments	199,000	110,000	40,000	69,000	418,000
Employee Contributions	<u>(319,000)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(319,000)</u>
Total ARC 2015 / 2016	5,193,000	3,045,000	1,116,000	1,897,000	11,251,000
Expected Benefit Payments 2015 / 2016	3,472,000	2,702,000	736,000	1,310,000	8,220,000
ARC minus EBP 2015 / 2016	1,721,000	343,000	380,000	587,000	3,031,000

GASB 45 Annual Required Contribution (ARC)					
Annual Required Contribution (ARC)					Grand
2016 / 2017 Fiscal Year	Police & Fire	Town	Certified	Non-Certified	Total
Normal Cost	\$1,245,000	\$405,000	\$232,000	\$361,000	\$2,243,000
29 Year Amortization of UAAL	4,436,000	2,685,000	916,000	1,586,000	9,623,000
Interest - Mid Year Payments	213,000	116,000	43,000	73,000	445,000
Employee Contributions	<u>(330,000)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(330,000)</u>
Total ARC 2016 / 2017	5,564,000	3,206,000	1,191,000	2,020,000	11,981,000
Expected Benefit Payments 2016 / 2017	3,724,000	2,902,000	788,000	1,426,000	8,840,000
ARC minus EBP 2016 / 2017	1,840,000	304,000	403,000	594,000	3,141,000

Annual Required Contribution (ARC)					Grand
2017 / 2018 Fiscal Year	Police & Fire	Town	Certified	Non-Certified	Total
Normal Cost	\$1,289,000	\$419,000	\$240,000	\$374,000	\$2,322,000
28 Year Amortization of UAAL	4,757,000	2,812,000	980,000	1,689,000	10,238,000
Interest - Mid Year Payments	227,000	121,000	46,000	77,000	471,000
Employee Contributions	<u>(342,000)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(342,000)</u>
Total ARC 2017 / 2018	5,931,000	3,352,000	1,266,000	2,140,000	12,689,000
Expected Benefit Payments 2017 / 2018	3,998,000	3,044,000	830,000	1,574,000	9,446,000
ARC minus EBP 2017 / 2018	1,933,000	308,000	436,000	566,000	3,243,000



Participant Counts and Average Age as of July 1, 2015

Participant Counts			
Group	Active Participants	Retirees*	Total
Police & Fire	213	292	505
Town	206	269	475
BOE Certified	756	109	865
BOE Non Certified	<u>197</u>	<u>161</u>	<u>358</u>
Total	1,372	831	2,203

Average Age and Service			
Group	Active Average Age	Active Average Service	Retirees Average Age*
Police & Fire	38.7	11.1	66.3
Town	50.6	15.1	73.3
BOE Certified	44.8	12.0	67.9
BOE Non Certified	53.9	15.8	75.2

* Does not include spouses of retirees

Participant Counts and Average Age as of July 1, 2013

Participant Counts			
Group	Active Participants	Retirees *	Total
Town	376	564	940
BOE Certified	791	100	891
BOE Non Certified	<u>178</u>	<u>146</u>	<u>324</u>
Total	1,345	810	2,155

Average Age and Service		
Group	Active Average Age	Retirees Average Age*
Town	44.6	69.1
BOE Certified	44.9	66.2
BOE Non Certified	52.8	61.1

* Does not include spouses of retirees



Projected Benefit Payments

Fiscal Year Beginning July 1st	Currently Active Employees	Currently Retired Employees	Total
2015	\$196,000	\$8,024,000	\$8,220,000
2016	582,000	8,258,000	8,840,000
2017	967,000	8,479,000	9,446,000
2018	1,385,000	8,636,000	10,021,000
2019	1,851,000	8,746,000	10,597,000
2020	2,333,000	8,808,000	11,141,000
2021	2,829,000	8,794,000	11,623,000
2022	3,344,000	8,751,000	12,095,000
2023	3,822,000	8,715,000	12,537,000
2024	4,279,000	8,748,000	13,027,000
2025	4,817,000	8,636,000	13,453,000
2026	5,333,000	8,517,000	13,850,000
2027	5,817,000	8,430,000	14,247,000
2028	6,248,000	8,217,000	14,465,000
2029	6,657,000	7,992,000	14,649,000
2030	7,090,000	7,738,000	14,828,000
2031	7,310,000	7,521,000	14,831,000
2032	7,658,000	7,272,000	14,930,000
2033	7,992,000	7,135,000	15,127,000
2034	8,270,000	7,019,000	15,289,000



Description of Actuarial Methods

Actuarial Cost Method: Entry Age Normal

Normal Cost

The normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation. The normal cost accrual rate equals the present value of future benefits for the participant, determined as of the participant's entry age, divided by the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

Accrued Liability

A participant's accrued liability equals the present value, at the participant's attained age, of future benefits, less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits

The entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

Amortization Method

The Unfunded Accrued Liability is amortized each year over a closed 30-year period. In addition, amortization growth based upon the table below was used.

Fiscal	Amortization Growth
2016	2.50%
2017	2.25%
2018	2.00%

Asset Valuation Method

Market Value.

Contribution Policy

The plan sponsors' contribution policy is to phase into funding 100% of the Annual Required Contribution (ARC) by fiscal 2024.



Actuarial Assumptions – Town and BOE Non-Certified

Interest

7.50% (prior: 7.75%)

Since the OPEB plan is funded, the selection of the discount rate is based on the expected long-term return on plan assets.

Inflation

2.5%

This assumption is based on long-term historical inflation. While near-term averages have been lower, we do not believe this trend will continue indefinitely and expect that there will be a reversion to the long-term average.

Payroll Growth

3.5% (prior 4.0%)

Mortality

RP-2000 Mortality Table with separate male and female rates, with separate tables for non-annuitants and annuitants, projected to the valuation date with Scale AA.

Mortality Improvement

Projected from valuation date to 2020 using Scale AA.

We have selected a mortality assumption commonly used by public retirement systems. It is based on recently published pension mortality studies released by the Society of Actuaries. We are using Scale AA because it is consistent with recent industry analysis of future mortality improvement based on Social Security data.

Assumed Rates of Retirement

Age	Rate
45-49	1%
50-54	3
55-59	5
60	15
61-64	10
65-69	40
70	100



Service-Based Withdrawal Rates

Age	Service			
	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

Assumed Rates of Disability

Age	Rate
20	.08%
30	.09
40	.17
50	.51
60	1.44

The actuarial assumptions in regards to rates of decrements shown above are based on a standard table modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Amortization Growth Rate

Starts at 2.5% in 2015 decreasing by 0.25% per year down to 0% in 2025 and beyond. (prior: 4.0%)

Average Annual Premium

Pre-65:	Single	Dual
BOE-Non-Certified	\$7,880	\$17,099
Town Actives	8,097	16,599
Town Retirees	9,815	20,151
Post-65:		
Town Retirees	\$4,356	\$8,928

Premiums were used as the basis for per capita costs.



Expected per Capita Claims (without Medicare Coordination)

We assume that actual claims will be distributed according to the following morbidity table:

BOE Non-Certified (Pre-65)

Sample Age	Expected Claim
45	\$6,775
50	7,854
55	9,238
60	11,025
64	12,997

Town Actives (Pre-65)

Sample Age	Expected Claim
45	\$7,607
50	8,819
55	10,373
60	12,379
64	14,594

Town Retirees (Pre-65)

Sample Age	Expected Claim
45	\$6,634
50	7,690
55	9,045
60	10,795
64	12,726

Town Retirees (Post-65)

Sample Age	Expected Claim
65	\$3,440
70	3,987
75	4,511
80	4,981
85	5,235

The sample per capita claims were developed as follows: Using the total count of active employees and retired participants currently electing medical coverage, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries Section prepared by J.P Petertil from August 1, 2003: "Aging Curves for Health Care Costs in Retirement", we allocate the total projected claims by age.



For BOE Non-Certified and Town active plans integrated with Medicare, the premium is assumed to be unaffected by age.

Trend

Medical trend starts at 8.0% in 2015, decreases by 0.5% per year down to 4.5% in 2022 and beyond. (prior: 6.80% grading down to an ultimate inflation rate of 4.7% over a period of 72 years)

Health care trend rates reflect both the current and long-term outlook for increases in health care costs. The short term trend rate is based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption of 2.5% plus 2% to reflect expectations for long-term medical inflation.

Utilization

We assume that 95% of actives and 65% of their spouses will elect medical benefit at retirement.

The actuarial assumptions in regards to utilization shown above are based on standard assumptions modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Marriage Rates at Retirement

We assume 80% of active males and 65% of active females will be married at retirement, and that husbands will be 3 years older than their wives.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"):

Effective in 2020 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which (in 2018) are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds (in 2018) for retirees who are between ages 55 and 65 are \$11,850 and \$30,950 for single and family coverage respectively.

After 2018, the thresholds are indexed by CPI (CPI +1% in 2018 only). CPI is assumed to be 3.0% in all future years. The impact of this future excise tax has been reflected in plan liabilities.

Other Requirements of PPACA:

Extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

Elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.



Actuarial Assumptions – BOE Certified

Interest

7.50% (prior: 7.75%)

Since the OPEB plan is funded, the selection of the discount rate is based on the expected long-term return on plan assets.

Inflation

2.5%

This assumption is based on long-term historical inflation. While near-term averages have been lower, we do not believe this trend will continue indefinitely and expect that there will be a reversion to the long-term average.

Payroll Growth

3.5% (prior: 4.0%)

Mortality

RP-2000 Mortality Table with separate male and female rates, with 2-year setback and separate tables for non-annuitants and annuitants, projected to the valuation date with Scale AA.

Mortality Improvement

Projected from valuation date to 2020 using Scale AA.

We have selected a mortality assumption commonly used by public retirement systems. It is based on recently published pension mortality studies released by the Society of Actuaries. We are using Scale AA because it is consistent with recent industry analysis of future mortality improvement based on Social Security data.



Assumed Rates of Retirement (from CT State TRS 2014 OPEB Valuation)

Age	Eligible for Normal (Unreduced) Retirement (Age 60 and 20 Yrs. Serv. or 35 yrs. Serv.)		Eligible for Early (Reduced) Retirement (Age 55 and 20 Yrs. Serv. or 25 yrs. Serv.)	
	Male	Female	Male	Female
50-51	27.5%	15.0%	2.0%	2.0%
52	27.5	15.0	3.0	3.0
53	27.5	15.0	3.0	4.0
54	27.5	15.0	4.5	5.0
55	38.5	30.0	4.5	6.0
56	38.5	30.0	7.0	8.5
57	38.5	30.0	10.0	9.5
58	38.5	30.0	11.0	10.0
59	38.5	30.0	12.0	10.0
60	22.0	20.0		
61-62	25.3	22.5		
63-64	27.5	22.5		
65	36.3	30.0		
66-69	27.5	30.0		
70-79	100.0	40.0		
80	100.0	100.0		

Service-Based Withdrawal Rates (until eligible to retire) (from CT State TRS 2014 OPEB Valuation)

Service	Male Rate	Female Rate
0-1	.1400	.1200
1-2	.0850	.0900
2-3	.0550	.0700
3-4	.0450	.0600
4-5	.0350	.0550
5-6	.0250	.0500
6-7	.0240	.0450
7-8	.0230	.0350
8-9	.0220	.0300
9-10	.0210	.0250
10 +	use age-related rates until eligible to retire	



Sample Age-Based Withdrawal Rates (until eligible to retire) (from CT State TRS 2014 OPEB Valuation)

Age	Male Rate	Female Rate
25-37	.0120	.0350
40	.0120	.0230
45	.0126	.0130
50	.0196	.0125
55	.0276	.0160
59+	.0300	.0190

The actuarial assumption in regards to rates of decrements is based on the rates used by the *State of Connecticut Teachers' Retirement Plan* actuaries.

Assumed Rates of Non-Service-Connected Disability

Age	Male Rates	Female Rates
20	.005%	.005%
30	.005	.004
40	.007	.007
50	.033	.026
60+	.128	.050

The actuarial assumption in regards to rate of disability shown above is based on a standard table modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Amortization Growth Rate

Starts at 2.5% in 2015 decreasing by 0.25% per year down to 0% in 2025 and beyond. (prior: 4.0%)

Average Annual Premium

Pre-65:	Single	Dual
BOE-Non-Certified	\$7,880	\$17,099

Premiums were used as the basis for per capita costs.

Expected per Capita Claims (without Medicare Coordination)

We assume that actual claims will be distributed according to the following morbidity table:

Sample Age	Expected Claim
45	\$6,775
50	7,854
55	9,238
60	11,025
65	13,543
70	15,700
75	17,763



The sample per capita claims for plans not integrated with Medicare were developed as follows: Using the total count of active employees and retired participants currently electing medical coverage, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries Section prepared by J.P. Petertil from August 1, 2003: "Aging Curves for Health Care Costs in Retirement", we allocate the total projected claims by age. For plans integrated with Medicare, the premium is assumed to be unaffected by age.

Trend

Medical trend starts at 8.0% in 2015, decreases by 0.5% per year down to 4.5% in 2022 and beyond. (prior: 6.80% grading down to an ultimate inflation rate of 4.7% over a period of 72 years)

Health care trend rates reflect both the current and long-term outlook for increases in health care costs. The short term trend rate is based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption of 2.5% plus 2% to reflect expectations for long-term medical inflation.

Medicare Eligibility

We assume that 20% of teachers hired prior to 1986 will continue coverage post 65, without Medicare coverage.

Utilization

We assume that 95% of actives and 80% of their spouses will elect medical benefit at retirement.

The actuarial assumptions in regards to utilization shown above are based on standard assumptions modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Marriage Rates at Retirement

We assume 85% of active males and 75% of active females will be married at retirement, and that husbands will be 3 years older than their wives.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"):

Effective in 2020 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which (in 2018) are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds (in 2018) for retirees who are between ages 55 and 65 are \$11,850 and \$30,950 for single and family coverage respectively.

After 2018, the thresholds are indexed by CPI (CPI +1% in 2018 only). CPI is assumed to be 3.0% in all future years. The impact of this future excise tax has been reflected in plan liabilities.

Other Requirements of PPACA:

Extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

Elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.



Actuarial Assumptions – Police & Fire

Interest

7.50% (prior: 7.75%)

Since the OPEB plan is funded, the selection of the discount rate is based on the expected long-term return on plan assets.

Inflation

2.5%

This assumption is based on long-term historical inflation. While near-term averages have been lower, we do not believe this trend will continue indefinitely and expect that there will be a reversion to the long-term average.

Payroll Growth

3.5% (prior: 4.0%)

Mortality

RP-2000 Mortality Table with separate male and female rates, with Blue Collar adjustment, separate tables for non-annuitants and annuitants, projected to the valuation date with Scale AA.

Mortality Improvement

Projected from valuation date to 2020 using Scale AA.

We have selected a mortality assumption commonly used by public retirement systems. It is based on recently published pension mortality studies released by the Society of Actuaries. We are using Scale AA because it is consistent with recent industry analysis of future mortality improvement based on Social Security data.

Assumed Rates of Retirement

Fire

Age	Rate
40-44	1%
45-49	5
50-55	10
56-64	25
65	100

Police

Age	Rate
30-39	1%
40-44	2
45-54	10
55-61	20
62	100



Service-Based Withdrawal Rates

Fire

None

Police

Crocker-Sarasas Table T-1

Age	Rate
20	5.44%
25	4.89
30	3.70
35	2.35
40	1.13
45	0.27
50+	0.00

The actuarial assumptions in regards to rates of decrements shown above are based on a standard table modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Amortization Growth Rate

Starts at 2.5% in 2015 decreasing by 0.25% per year down to 0% in 2025 and beyond. (prior: 4.0%)

Average Annual Premium

Pre-65:	Single	Dual
Police & Fire Actives	\$8,097	\$16,599
Police & Fire Retirees	9,815	20,151

Post-65:

Police & Fire Retirees	\$4,356	\$8,928
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Premiums were used as the basis for per capita costs.

Expected per Capita Claims (without Medicare Coordination)

We assume that actual claims will be distributed according to the following morbidity table:

Actives (Pre-65)

Sample Age	Expected Claim
45	\$7,607
50	8,819
55	10,373
60	12,379
64	14,594



Retirees (Pre-65)

Sample Age	Expected Claim
45	\$6,634
50	7,690
55	9,045
60	10,795
64	12,726

Retirees (Post-65)

Sample Age	Expected Claim
65	\$3,440
70	3,987
75	4,511
80	4,981
85	5,235

The sample per capita claims were developed as follows: Using the total count of active employees and retired participants currently electing medical coverage, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries Section prepared by J.P. Petertil from August 1, 2003: "Aging Curves for Health Care Costs in Retirement", we allocate the total projected claims by age.

For active plans integrated with Medicare, the premium is assumed to be unaffected by age.

Trend

Medical trend starts at 8.0% in 2015, decreases by 0.5% per year down to 4.5% in 2022 and beyond. (prior: 6.80% grading down to an ultimate inflation rate of 4.7% over a period of 72 years)

Health care trend rates reflect both the current and long-term outlook for increases in health care costs. The short term trend rate is based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption of 2.5% plus 2% to reflect expectations for long-term medical inflation.

Utilization

We assume that 65% of actives and their spouses will elect medical benefit at retirement.

The actuarial assumptions in regards to utilization shown above are based on standard assumptions modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Marriage Rates at Retirement

We assume 80% of active males and 65% of active females will be married at retirement, and that husbands will be 3 years older than their wives.



Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"):

Effective in 2020 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which (in 2018) are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds (in 2018) for retirees who are between ages 55 and 65 are \$11,850 and \$30,950 for single and family coverage respectively.

After 2018, the thresholds are indexed by CPI (CPI +1% in 2018 only). CPI is assumed to be 3.0% in all future years. The impact of this future excise tax has been reflected in plan liabilities.

Other Requirements of PPACA:

Extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

Elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.



Summary of Plan Provisions – Town

This summary is intended only to describe our understanding of the essential 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.

Fire (61)

Eligibility: For firefighters hired on or before July 1, 2005, the earliest of age 55 with 10 years of Credited Service, 20 years of Credited Service, or age 65. For Firefighters hired after July 1, 2005, age 50 with 25 years of Credited Service or age 65. An employee retiring at age 65 but without meeting the service requirement is not eligible for retiree health insurance.

Premium Sharing – Fire - Date of hire prior to April 1, 1986:

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

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

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

For Fire employees hired on or after April 1, 1986 and prior to January 1, 2001: Town pays 100% of premium with 20 years of credited service, age 55 years and 10 years of credited service, or age 65. For 10 – 15 years of credited service, Town plan will pay as secondary if retiree has primary insurance.

Fire employees with date of hire on or after January 1, 2001 and prior 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.

Fire employees hired after April 1, 2014, pay 25% of the self-insured equivalent rate for retiree and retiree dependent healthcare in retirement. These employees do not contribute to retiree and retiree dependent healthcare as active employees.

Life Insurance: 50% of the amount of life insurance in force immediately prior to retirement (not to exceed \$25,000).



Police (60)

Eligibility: Police Officers hired on or after 7/1/1986 but prior to 8/1/2006, 20 years of credited service. Those hired on or after 8/1/2006, must have 25 years of credited service to receive retiree health benefits.

Police employees with date of hire on or after July 1, 1986 and prior to August 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 August 1, 2006:

Less than 25 years of service: No coverage.

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

On-the-job Disability Pension, Police and Fire: Effective July 1, 1987, Town pays 100% of the premium.

Life Insurance: Effective July 1, 1981, 25% of the amount of life insurance in force immediately prior to retirement (not to exceed \$7,500).

Police & Fire Active Contributions

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

Effective July 1, 2006, active Police employees pay 1.65% 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 Fire employees hired after July 1, 2005 but before April 1, 2014, pay 1% of bi-weekly base wage toward the cost of retiree health benefits and an additional 0.65% toward the cost of dependent health benefits.

Town Employees

Streets Union (62) Eligibility:

Date of hire before July 1, 2003: 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.

Date of hire on or after July 1, 2003: Earliest of age 65 with 15 years of Credited Service, age 70 or any age with 35 years of Credited Service.

Life Insurance: 50% of the amount of life insurance in force immediately prior to retirement (Effective October 27, 1998, not to exceed \$25,000)



Dispatchers Union (64) Eligibility:

Date of hire on or after January 1, 1999 but prior to 7/1/2007: Earliest of age 55 with 25 years of Credited Service or age 60 with 10 years of Credited Service or 20 years of credited service with no age requirement or age 70.

Date of hire on or after July 1, 2007: Earliest of any age with 25 years of service or age 60 with 10 years of Credited Service or age 70

Life Insurance: 50% of the amount of life insurance in force immediately prior to retirement (Effective May 9, 1999, not to exceed \$25,000)

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

Date of hire before July 1, 2003: 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.

Date of hire on or after July 1, 2003: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.

Life Insurance: 50% of the amount of life insurance in force immediately prior to retirement (Effective January 1, 1998, not to exceed \$25,000). For Grounds Union members hired on or after November 10, 2015, each employee pensioned will have their group life insurance automatically reduced to \$25,000.

Non-Bargaining Non-Public School Nurses (58), Directors (59), Clerical Union (65), Non-Bargaining Clerical (66), Non-Bargaining Unit (68), Professional/Management Union (73), , Parking Monitors (81), Non-Bargaining Corporate Counsel Management (87) and Town Manager Eligibility:

Date of hire before July 1, 2003: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, or age 70.

Date of hire on or after July 1, 2003: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.

Life Insurance (exclude Parking Monitors (81)): 50% of the amount of life insurance in force immediately prior to retirement (Effective January 1, 1998, not to exceed \$25,000). For Professional and Management Union members hired on or after November 10, 2015, each employee pensioned will have their group life insurance automatically reduced from the coverage amount as an active employee to \$25,000. The Town Manager pensioned immediately upon termination will have life insurance reduced to \$100,000.



Dispatchers Union (64) Eligibility:

Date of hire before 7/1/1986, Town pays 100% with Normal retirement pension.

Date of hire on or after July 1, 1986 and prior to January 1, 1999:

Receive a normal retirement pension benefit with eligibility at age 55 with 25 years of service: Town pays 93% of the premium until Medicare eligibility, then Town pays 100%.

Receive a normal retirement pension benefit with eligibility at age 60 with 10 years of service: Town pays 70% of the premium until Medicare eligibility, then Town pays 100%.

Date of hire on or after January 1, 1999 but prior to July 1, 2007:

Receive a normal retirement pension benefit with eligibility at 20 years of credited service and have at least 25 years of service but has not reached age 55: Town pays 82.5% of the premium until Medicare eligibility, then Town pays 100%.

Receive a normal retirement pension benefit with eligibility at age 55 with 25 years of service: Town pays 85% of the premium until Medicare eligibility, then Town pays 100%.

Receive a normal retirement pension benefit with eligibility at age 60 with 10 years of service: Town pays 70% of the premium until Medicare eligibility, then Town pays 100%.

Any active employee as of January 1, 1999, or hired on or after January 1, 1999 but prior to July 1, 2007, who retires with a normal retirement benefit with 20 years of credited service, the Town pays 80%.

Premium Sharing:

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

All non-public safety groups except for Dispatchers Union (64):

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

Date of hire on or after November 10, 1997 and on or before June 30, 2003:

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%.

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 on or after July 1, 2003:

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%.



Health Benefits with a Disability Pension:

Streets Union (62): Effective October 27, 1998

Dispatchers Union (64): Effective January 1, 1999

Non-Bargaining Non-Public School Nurses (58), Directors (59), Clerical Union (65) Non-Bargaining Clerical (66), Non-Bargaining Unit (68), Grounds Union (70), Building Maintenance Union (71), Professional /Management Union (73), Supervisory Union (74), , Non-Bargaining Corporate Counsel Management (87), and Town Managers: Effective January 1, 1998

Eligibility: At least of 10 years of service. Dependent coverage will be terminated after 1 year.

Premium Sharing: Employees shall contribute $(100 - 3.5 \times \text{employee's years of service})$ percent.



Summary of Plan Provisions – BOE

This summary is intended only to describe our understanding of the essential 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.

Board of Education

Teachers and Administrators Eligibility:

Teachers or Administrators retiring under the Connecticut State Teachers Retirement System shall be eligible to receive health benefits for self and spouse.

Secretarial/Clerical (02) Eligibility:

Date of hire before May 1, 2006: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, or age 70.

Date of hire on or after May 1, 2006: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.

Life Insurance: \$10,000

Custodial Union (05) Eligibility:

Date of hire before January 1, 2006: 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.

Date of hire on or after January 1, 2006: Earliest of age 65 with 15 years of Credited Service, age 70, or any age with 35 years of Credited Service.

Maintenance Union (06) Eligibility:

Date of hire before July 1, 2004: 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.

Date of hire on or after July 1, 2004: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.

Nurses Union (07) Eligibility:

Date of hire before July 1, 2004: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, or age 70.

Date of hire on or after July 1, 2004: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.

Non-Bargaining Union (09) Eligibility:

Date of hire before July 1, 2006: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, or age 70.

Date of hire on or after July 1, 2006: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.



Custodial III Union (10) Eligibility:

Date of hire before July 1, 2005: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service or age 70.

Date of hire on or after July 1, 2005: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service or age 70.

Professional and Technical Union (14) Eligibility:

Date of hire before July 1, 2004: Earliest of age 55 with 25 years of Credited Service, age 60 with 10 years of Credited Service, or age 70.

Date of hire on or after July 1, 2004: Earliest of age 65 with 15 years of Credited Service, age 62 with 35 years of Credited Service, or age 70.

Life Insurance: \$15,000

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

Not eligible for OPEB.

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.

Custodial Union (05), Maintenance Union (06), 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.

Professional and Technical (14):

Date of hire before July 1, 2007: Board pays 100% of the premium for employee and 50% of the premium for dependent.

Date of Hire on or after July 1, 2007: Board pays 75% of the premium for employee and 50% of the premium for dependent.