

RETIREMENT BENEFITS ADVISORY COMMITTEE

Town of Brookfield

DRAFT Agenda Items

Meeting 6:00pm on Thursday April 9, 2015

Location: Room 209 in Town Hall

Agenda

1. Approve minutes from March 12, 2015 meeting.
2. Plan Amendment update- (Fern)
3. Review latest OPEB Valuation Report from H&H
4. Pension Benefits for Elected Officials – review draft of RBAC recommendation and brief overview with quick slides
5. Status of OPEB Trust Documents, Funding Strategy and signed approvals from BOS, BOE and BOF. Impact of WPCA.
6. OPEB custody account with Wells Fargo
7. Next steps for Enhanced Retirement Plan including formal adoption by BOS, actuarial analysis, plan document amendments, RFP for service providers, specific plan participant examples.
8. New Business:

Other:

Remaining 2015 Meeting Dates

MAY 14
JUNE 11
JULY 09
AUGUST 13
SEPTEMBER 10
OCTOBER 08
NOVEMBER 12
DECEMBER 10

TOWN CLERK'S OFFICE
BROOKFIELD, CT

APR 28 2015 11:04 AM

Joan M. Locke
JOAN M. LOCKE, TOWN CLERK



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Town of Brookfield

**GASB 45 Valuation
as of July 1, 2014**

Richard S. Sych
President and
Consulting Actuary

Deborah Cook-Hebert
Actuarial Specialist

March 13, 2015

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Executive Summary

The July 1, 2014 accrued liability of \$26,493,390 is lower than anticipated. The primary reason for this gain was due to the fact that the post-65 medical premium was significantly lower than anticipated from the 2012 valuation. In addition, there were nine teachers hired prior to April, 1986 who dropped the Town's medical coverage resulting in a gain of \$2,800,000.

With this valuation we updated the trend to 9% for 2014, decreasing 0.5% per year, to an ultimate 5.0% for 2022 and later. This resulted in a slight loss offsetting the gains.

In addition, this valuation reflects plan changes for the Town Non-Union, Town CSEA, Highway, Public Works and Police which resulted in a total gain of about \$5,350,000.

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
July 1, 2008	\$0	\$28,275,976	\$28,275,976	0%	\$7,750,003	364.9%
July 1, 2010	0	29,674,538	29,674,538	0%	23,952,238	123.9%
July 1, 2012	0	33,977,100	33,977,100	0%	24,685,830	137.6%
July 1, 2014	0	26,493,390	26,493,390	0%	26,992,164	98.2%

* 2008 Payroll excluded Board of Education Certified Staff payroll.

History of Annual Required Contribution (ARC)	
Year Ended June 30	Annual Required Contribution (ARC)
2012	3,137,050
2013	3,195,210
2014	3,712,467
2015	3,783,881
2016	2,632,868
2017	2,678,075

Certification

This report presents the results of the July 1, 2014 Actuarial Valuation for Town of Brookfield 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 and June 30, 2017. 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 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 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 *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: 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 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.


Richard S. Sych, FSA, MAAA,
Enrolled Actuary 14-05065

March 13, 2015

Actuarial Accrued Liabilities (UAAL) and Annual Required Contribution (ARC)

GASB 45 Unfunded Actuarial Accrued Liability (UAAL)							
Actuarial Accrued Liability (AAL) 7/1/2014	Police	Other Town	Town Subtotal	Certified	Non-Certified	BOE Subtotal	Grand Total
Actives	8,267,601	5,646,942	13,914,543	4,895,276	112,592	5,007,868	18,922,411
Retirees	<u>1,129,856</u>	<u>3,320,364</u>	<u>4,450,220</u>	<u>3,120,759</u>	0	<u>3,120,759</u>	<u>7,570,979</u>
Total	9,397,457	8,967,306	18,364,763	8,016,035	112,592	8,128,627	26,493,390
Assets 7/1/2014	0	0	0	0	0	0	0
Unfunded Actuarial Accrued Liability (UAAL) 7/1/2014	9,397,457	8,967,306	18,364,763	8,016,035	112,592	8,128,627	26,493,390
Funded Ratio	0%	0%	0%	0%	0%	0%	0%

GASB 45 Annual Required Contribution (ARC)							
Annual Required Contribution (ARC) 2015 / 2016 Fiscal Year	Police	Other Town	Town Subtotal	Certified	Non-Certified	BOE Subtotal	Grand Total
Normal Cost	511,832	296,911	808,743	289,559	9,752	299,311	1,108,054
30 Year Amortization of UAAL	522,554	498,635	1,021,189	445,739	6,261	452,000	1,473,189
Interest - Mid Year Payment	<u>20,688</u>	<u>15,911</u>	<u>36,599</u>	<u>14,706</u>	<u>320</u>	<u>15,026</u>	<u>51,625</u>
Total ARC 2015 / 2016	1,055,074	811,457	1,866,531	750,004	16,333	766,337	2,632,868
Annual Required Contribution (ARC) 2016 / 2017 Fiscal Year	Police	Other Town	Town Subtotal	Certified	Non-Certified	BOE Subtotal	Grand Total
Normal Cost	532,305	308,787	841,092	301,141	10,142	311,283	1,152,375
30 Year Amortization of UAAL	522,554	498,635	1,021,189	445,739	6,261	452,000	1,473,189
Interest - Mid Year Payment	<u>21,097</u>	<u>16,148</u>	<u>37,245</u>	<u>14,938</u>	<u>328</u>	<u>15,266</u>	<u>52,511</u>
Total ARC 2016 / 2017	1,075,956	823,570	1,899,526	761,818	16,731	778,549	2,678,075

**Actuarial Accrued Liabilities (UAAL) and Annual Required Contribution (ARC)
Non-WPCA and WPCA Split**

GASB 45 Unfunded Actuarial Accrued Liability (UAAL)			
Actuarial Accrued Liability (AAL) 7/1/2014	Non-WPCA	WPCA	Total Town
Actives	4,928,886	718,056	5,646,942
Retirees	<u>3,038,425</u>	<u>281,939</u>	<u>3,320,364</u>
Total	7,967,311	999,995	8,967,306
Assets 7/1/2014	<u>0</u>	<u>0</u>	<u>0</u>
Unfunded Actuarial Accrued Liability (UAAL) 7/1/2014	7,967,311	999,995	8,967,306
Funded Ratio	0%	0%	0%

GASB 45 Annual Required Contribution (ARC)			
Annual Required Contribution (ARC) 2015 / 2016 Fiscal Year	Non-WPCA	WPCA	Total Town
Normal Cost	243,599	53,312	296,911
30 Year Amortization of UAAL	443,029	55,606	498,635
Interest - Mid Year Payment	<u>13,733</u>	<u>2,178</u>	<u>15,911</u>
Total ARC 2015 / 2016	700,361	111,096	811,457
Annual Required Contribution (ARC) 2016 / 2017 Fiscal Year	Non-WPCA	WPCA	Total Town
Normal Cost	253,343	55,444	308,787
30 Year Amortization of UAAL	443,029	55,606	498,635
Interest - Mid Year Payment	<u>13,927</u>	<u>2,221</u>	<u>16,148</u>
Total ARC 2016 / 2017	710,299	113,271	823,570

**Participant Counts and Average Attained Age
and Service as of July 1, 2014**

Participant Counts				
Group	Active Participants	Retirees	Spouses of Retirees	Total
Police	29	5	3	34
Town	69	34	9	103
BOE Certified	267	20	5	287
BOE Non Certified	<u>4</u>	<u>0</u>	<u>0</u>	<u>4</u>
Total	369	59	17	428

Average Age and Service				
Group	Average Age of Active Participants	Average Service of Active Participants	Average Age of Retirees	Average Age of Retired Spouses
Police	44.4	16.3	64.4	59.3
Town	55.2	13.4	76.8	71.1
BOE Certified	44.5	11.2	66.6	62.0
BOE Non Certified	52.0	12.2	N/A	N/A
Total	46.6	12.1	72.3	66.4

As of July 1, 2012

Participant Counts				
Group	Active Participants	Retirees	Spouses of Retirees	Total
Police	31	5	3	36
Town	66	34	9	100
BOE Certified	242	26	5	268
BOE Non Certified	<u>7</u>	<u>0</u>	<u>0</u>	<u>7</u>
Total	346	65	17	411

Average Age and Service				
Group	Average Age of Active Participants	Average Service of Active Participants	Average Age of Retirees	Average Age of Retired Spouses
Police	45.8	17.3	62.4	57.3
Town	53.1	11.9	74.8	69.1
BOE Certified	45.0	11.5	66.1	62.0
BOE Non Certified	55.9	16.6	N/A	N/A
Total	46.9	12.3	70.3	64.9

Projected Benefit Payments

Projected Benefit Payments - Town and Police			
Fiscal Year July 1st	Currently Active Employees	Currently Retired Employees	Total
2014	\$188,256	\$293,906	\$482,162
2015	241,762	313,409	555,171
2016	309,405	320,090	629,495
2017	352,942	336,947	689,889
2018	398,241	342,272	740,513
2019	376,208	301,336	677,544
2020	383,387	300,630	684,017
2021	339,144	284,439	623,583
2022	356,917	282,323	639,240
2023	460,005	276,989	736,994
2024	646,936	270,694	917,630
2025	774,160	263,539	1,037,699
2026	847,289	255,742	1,103,031
2027	1,154,809	247,176	1,401,985
2028	1,288,168	237,981	1,526,149
2029	1,343,052	228,359	1,571,411
2030	1,205,047	218,217	1,423,264
2031	1,373,653	207,699	1,581,352
2032	1,436,826	196,638	1,633,464
2033	1,522,505	185,456	1,707,961

Projected Benefit Payments (cont.)

Projected Benefit Payments - Board of Education			
Fiscal Year July 1st	Currently Active Employees	Currently Retired Employees	Total
2014	\$25,548	\$194,260	\$219,808
2015	66,873	185,476	252,349
2016	109,912	168,583	278,495
2017	143,385	179,753	323,138
2018	181,158	159,717	340,875
2019	203,202	173,061	376,263
2020	232,699	186,039	418,738
2021	283,181	186,360	469,541
2022	299,255	195,137	494,392
2023	316,468	202,393	518,861
2024	357,354	208,786	566,140
2025	378,540	201,903	580,443
2026	385,028	204,984	590,012
2027	411,997	205,921	617,918
2028	428,817	205,734	634,551
2029	469,522	204,152	673,674
2030	493,831	201,001	694,832
2031	506,787	196,273	703,060
2032	581,375	189,314	770,689
2033	642,178	180,759	822,937

Projected Benefit Payments (cont.)

Projected Benefit Payments - Total			
Fiscal Year July 1st	Currently Active Employees	Currently Retired Employees	Total
2014	\$213,804	\$488,166	\$701,970
2015	308,635	498,885	807,520
2016	419,317	488,673	907,990
2017	496,327	516,700	1,013,027
2018	579,399	501,989	1,081,388
2019	579,410	474,397	1,053,807
2020	616,086	486,669	1,102,755
2021	622,325	470,799	1,093,124
2022	656,172	477,460	1,133,632
2023	776,473	479,382	1,255,855
2024	1,004,290	479,480	1,483,770
2025	1,152,700	465,442	1,618,142
2026	1,232,317	460,726	1,693,043
2027	1,566,806	453,097	2,019,903
2028	1,716,985	443,715	2,160,700
2029	1,812,574	432,511	2,245,085
2030	1,698,878	419,218	2,118,096
2031	1,880,440	403,972	2,284,412
2032	2,018,201	385,952	2,404,153
2033	2,164,683	366,215	2,530,898

Summary of Plan Provisions Valued

This summary is being provided for valuation purposes only. This summary outlines the major features of the Plan. It does not give full details or cover all aspects of the Plan.

Town Employees (CSEA and Non-Union)

Eligibility for Medical Coverage	Age 62 with 20 years of service. Town Non-union employees hired on or after 1/1/11 and CSEA employees hired on or after 7/1/2010 are not eligible for any post-retirement medical benefits (including Medicare Supplemental insurance).
Retiree/Spouse Cost of Medical Coverage	<p><u>Prior to age 65</u>, the retiree and spouse pay a varying percentage of medical plan premium based on years of service at retirement. At 10 years, the retiree pays 85% of the premium. The percent drops 5% for each additional year until at 25 years, the retiree pays 10% of the cost. The Town pays 100% of the cost for retirees with over 25 years of service.</p> <p><u>At ages 65 and above</u>, For retirees who retire after June 30, 2010, the retiree pays 25% of the cost for coverage for retiree and spouse after June 30, 2017. There is no retiree payment prior to June 30, 2017 or for retirees who retired prior to June 30, 2010.</p>
Plan of Coverage	Self-insured CIGNA plans.
Retiree/Spouse Cost of Dental Coverage	Pre-65 coverage only. Cost-share same as medical
Life Insurance Benefit	\$8,000.

Town Employees (Highway and Public Works)

Eligibility for Medical Coverage	Age 62 with 20 years of service. Anyone hired on or after 7/1/2010 are not eligible for any post-retirement medical benefits (including Medicare Supplemental insurance).
Retiree/Spouse Cost of Medical Coverage	<p><u>Prior to age 65</u>, the retiree pays 40% for both the retiree and spouse.</p> <p><u>At ages 65 and above</u>, the retiree pays 25% for the retiree and 30% for the spouse. Existing retirees pay \$0.</p>
Plan of Coverage	Self-insured CIGNA plans.
Retiree/Spouse Cost of Dental Coverage	Pre-65 coverage only. Cost-share same as medical
Life Insurance Benefit	\$8,000.

Summary of Plan Provisions Valued (continued)

Police Department

Eligibility for Medical Coverage	Age 55 with 10 years of service or 25 years of service with no age limit.
Retiree/Spouse Cost of Medical Coverage	<u>Prior to age 65</u> , the retiree pays 20% for employee and spouse coverage for 5 years. After 5 years, the retiree pays 20% for the retiree and 100% for the spouse. <u>At ages 65 and above</u> , the retiree pays 20% for the employee and spouse. Existing retirees pay 0% to 5% depending on the contract in effect at the time of retirement.
Plan of Coverage	Self-insured CIGNA plans.
Retiree/Spouse Cost of Dental Coverage	Pre-65 coverage only. Cost-share same as medical
Life Insurance Benefit	None

BOE Certified Staff

Eligibility for Medical, Dental and Life Coverage	Age 50 with 25 years, age 55 with 20 years or age 60 with 10 years.
Retiree/Spouse Cost of Medical Coverage	Retiree pays 100% of the contribution, depending on the plan selected, up to age 65. Teachers who are not eligible for Medicare may remain in the pre-65 medical plan and pay 100% of the premium.
Plan of Coverage	Pre-65 self-insured CIGNA plans.
Retiree/Spouse Cost of Dental Coverage	Same as medical
Life Insurance Benefit	None

BOE Nurses*

Eligibility for Medical, Dental and Life Coverage	Age 55 with 12 years of service.
Retiree/Spouse Cost of Medical Coverage	Retiree pays 100% of the contribution.
Plan of Coverage	Self-insured CIGNA plans.
Life Insurance Benefit	None

**Other Non-Certified BOE employees do not have access to postretirement coverage.*

Actuarial Assumptions – Town and BOE Nurses

The actuarial assumptions used in the determination of costs and liabilities are as follows:

Interest: 4.0%

Mortality: RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, separate tables for non-annuitants and annuitants, projected to the valuation date with Scale AA.

Mortality Improvement: Projected to date of decrement using Scale AA (generational mortality).

Employee Turnover: Percentage of Employees Terminating Prior to End of Year:

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	10.00	15.00
30	5.00	7.50
35	2.50	3.75
40	1.50	2.50
45	0.75	1.25
50+	0.00	0.00

Retirement Age: Age 62.

Trend: Medical: Starts at 9.0% in 2014, decreases by .5% per year down to 5.0% in 2022 and beyond for medical. (Changed from 9% in 2012, grading by .5% to 5% for 2020 and beyond for medical).

Dental: 5% per year.

<u>Age</u>	<u>%/Yr. Increase</u>
Up to 24	1.5%
25 – 29	1.8
30 – 34	2.1
35 – 39	2.4
40 – 44	2.7
45 – 49	3.0
50 – 54	3.3
55 – 59	3.6
60 – 64	4.2
65 – 69	3.0
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 – 89	0.5
90 – 90	0.0

Actuarial Assumptions – Town and BOE Nurses (continued)

Sample Age-Weighted claims cost: We assume claims will be distributed according to the following morbidity table:

<u>Sample Age</u>	<u>Expected Claims</u>
45	\$8,860
50	10,271
55	12,082
60	14,419

Current Annual Premium: Premiums vary by location: The average pre-65 premiums is \$12,798 per person per year

	<u>Single</u>	<u>Employee plus one</u>
<u>Pre 65:</u>		
Town	\$1,004.51	\$2,012.68
Highway	\$1,201.39	\$2,409.62
BOE Nurses	\$996.19	\$1,996.06
Post 65:	\$399.13	\$798.26
Dental:	\$41.14	\$83.59

Marriage Rates at Retirement: We assume 85% of active employees will be married at retirement and that husbands will be 3 years older than wives.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax (“Cadillac Tax”):
Effective in 2018 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds 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.

For purposes of this valuation, this future excise tax is assumed to have no impact on liabilities in that retirees pay the full premium and no age weighting is applied to the value of the tax.

Other Requirements of PPACA:

For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, 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

The actuarial assumptions used in the determination of costs and liabilities are as follows:

Interest:	4.0%
Mortality:	RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, separate tables for non-annuitants and annuitants, projected to the valuation date with Scale AA.
Mortality Improvement:	Projected to date of decrement using Scale AA (generational mortality).
Employee Turnover:	No termination is assumed.
Retirement Age:	25 years of service.
Trend:	Medical: Starts at 9.0% in 2014, decreases by .5% per year down to 5.0% in 2022 and beyond for medical. (Changed from 9% in 2012, grading by .5% to 5% for 2020 and beyond for medical). Dental: 5% per year.

Aging Rates effect on Medical Costs:	<u>Age</u>	<u>%/Yr. Increase</u>
	Up to 24	1.5%
	25 – 29	1.8
	30 – 34	2.1
	35 – 39	2.4
	40 – 44	2.7
	45 – 49	3.0
	50 – 54	3.3
	55 – 59	3.6
	60 – 64	4.2
	65 – 69	3.0
	70 – 74	2.5
	75 – 79	2.0
	80 – 84	1.0
	85 – 89	0.5
	90 – 90	0.0

Sample Age-Weighted claims cost: We assume claims will be distributed according to the following morbidity table:

<u>Sample Age</u>	<u>Expected Claims</u>
45	\$ 8,860
50	10,271
55	12,082
60	14,419

Actuarial Assumptions – Police (continued)

Current Annual Premium: Premiums vary by locations (Police was combined with other locations): The average pre-65 premiums is \$12,798 per person per year

	<u>Single</u>	<u>Employee plus one</u>
Pre 65:	\$1,234.28	\$2,478.11
Post 65:	\$399.13	\$798.26
Dental:	\$41.14	\$83.59
Retired Pre 65 Police	\$1,229.10	\$2,467.78

Marriage Rates at Retirement: We assume 85% of active employees will be married at retirement and that husbands will be 3 years older than wives.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax (“Cadillac Tax”):

Effective in 2018 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds 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.

For purposes of this valuation, this future excise tax is assumed to have no impact on liabilities in that retirees pay the full premium and no age weighting is applied to the value of the tax.

Other Requirements of PPACA:

For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, 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

The actuarial assumptions used in the determination of costs and liabilities are as follows:

- Interest: 4.0%
- Mortality: RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, separate tables for non-annuitants and annuitants, projected to the valuation date with Scale AA.
- Mortality Improvement: Projected to date of decrement using Scale AA (generational mortality).
- Assumed Rates of Retirement:
(from CT State TRS 2012 Pension 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		

Sample Service-Based Withdrawal Rates: (until eligible to retire) (from CT State TRS 2012 Pension 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	

Actuarial Assumptions – BOE (continued)

Sample Age-Based Withdrawal Rates:

(until eligible to retire)

(from CT State TRS 2012 Pension Valuation)

	<u>Age</u>	<u>Male Rate</u>	<u>Female Rate</u>
	25-37	.0120	.0350
	40	.0120	.0230
	45	.0126	.0140
	50	.0196	.0125
	55	.0276	.0160
	59+	.0310	.0190

Aging Rates effect on Medical Costs:

<u>Age</u>	<u>%/Yr. Increase</u>
Up to 24	1.5%
25 – 29	1.8
30 – 34	2.1
35 – 39	2.4
40 – 44	2.7
45 – 49	3.0
50 – 54	3.3
55 – 59	3.6
60 – 64	4.2
65 – 69	3.0
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 – 89	0.5
90 – 90	0.0

Sample Age-Weighted claims cost:

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

For current retirees:

<u>Sample Age</u>	<u>Expected Claims</u>
45	\$9,266
50	10,742
55	12,636
60	15,080
65	18,524
70	21,474
75	24,296

Actuarial Assumptions – BOE (continued)

Current Annual Premium:

	<u>Single</u>	<u>Employee plus one</u>
O.A.P. Plan:	\$1,201.78	\$2,413.19
H.S.A. Plan:	\$916.47	\$1,832.95

Spousal Assumptions:

50% of males and 50% of females assumed married with wives assumed to be three years younger than their husbands.

Trend:

Medical: Starts at 9.0% in 2014, decreases by 0.5% per year down to 5.0% in 2022 and beyond for medical. (Changed from 9% in 2012, grading by .5% to 5% for 2020 and beyond for medical).

Dental: 5% per year.

Percentage of non-Medicare eligible Retired Teachers Continuing After 65:

100%.

Percentage of Active eligible Teachers hired before 1986 that Will not be Medicare Eligible:

25%.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax (“Cadillac Tax”):

Effective in 2018 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. Thresholds 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.

For purposes of this valuation, this future excise tax is assumed to have no impact on liabilities in that retirees pay the full premium and no age weighting is applied to the value of the tax.

Other Requirements of PPACA:

For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.

Age-Weighted Claims Cost

Age	Town, Police, Nurses and		Age	Town, Police, Nurses and	
	Retired Teachers	Teachers (H S A)		Retired Teachers	Teachers (H S A)
20	\$5,271	\$5,513	65	\$17,712	\$18,524
21	5,350	5,595	66	18,243	19,080
22	5,430	5,679	67	18,790	19,652
23	5,512	5,764	68	19,354	20,242
24	5,594	5,851	69	19,935	20,849
25	5,678	5,939	70	20,533	21,474
26	5,781	6,046	71	21,046	22,011
27	5,885	6,154	72	21,572	22,561
28	5,990	6,265	73	22,112	23,125
29	6,098	6,378	74	22,664	23,704
30	6,208	6,493	75	23,231	24,296
31	6,338	6,629	76	23,696	24,782
32	6,472	6,768	77	24,170	25,278
33	6,607	6,910	78	24,653	25,783
34	6,746	7,056	79	25,146	26,299
35	6,888	7,204	80	25,649	26,825
36	7,053	7,377	81	25,905	27,093
37	7,222	7,554	82	26,164	27,364
38	7,396	7,735	83	26,426	27,638
39	7,573	7,921	84	26,690	27,914
40	7,755	8,111	85	26,957	28,193
41	7,964	8,330	86	27,092	28,334
42	8,179	8,555	87	27,228	28,476
43	8,400	8,785	88	27,364	28,618
44	8,627	9,023	89	27,500	28,761
45	8,860	9,266	90	27,638	28,905
46	9,126	9,544			
47	9,400	9,831			
48	9,682	10,126			
49	9,972	10,429			
50	10,271	10,742			
51	10,610	11,097			
52	10,960	11,463			
53	11,322	11,841			
54	11,696	12,232			
55	12,082	12,636			
56	12,517	13,090			
57	12,967	13,562			
58	13,434	14,050			
59	13,918	14,556			
60	14,419	15,080			
61	15,024	15,713			
62	15,655	16,373			
63	16,313	17,061			
64	16,998	17,777			

Actuarial Methodologies

Actuarial Cost Method: **Projected Unit Credit**

The Normal Cost is derived for each active participant as the actuarial present value of the projected benefits that are attributed to expected service in the current plan year. The Normal Cost for plan benefits is the total of the individual Normal Costs for active participants.

The Accrued Liability is equal to the portion of the present value of future benefits that is allocated to years of service before the valuation date.

Amortization Method: **30 years, level dollar, open**

The Unfunded Accrued Liability is amortized each year over a constant 30 year period, as a level dollar amount.

Asset Valuation Method: **Market Value**

Census Collection Date:

Town, BOE Non-Certified, and Police data were collected as of January 1, 2014.

BOE Certified data was collected as of September 1, 2014.