The Town of Winchester

OPEB Actuarial Valuation

June 30, 2017

September, 2017

Sherman Actuarial Services

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SECTION I - OVERVIEW

The Town of Winchester has engaged Sherman Actuarial Services, LLC to prepare an actuarial valuation of their post-retirement benefits program as of June 30, 2017. The Town provided employee data and premium information.

The purposes of the valuation are to analyze the current funded position of the Town's post-retirement benefits program, determine the level of contributions necessary to assure sound funding and provide reporting and disclosure information for financial statements, governmental agencies and other interested parties. This valuation report contains information required by the Government Accounting Standards Board's Statements Nos. 43 and 45, respectively entitled "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans" and "Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions."

Liabilities have been determined based on a 4.0% discount rate. This rate is a partial-prefunding rate, which is a blend of an 7.5% full pre-funding rate and a 3.5% no pre-funding rate. To estimate the effect of fully prefunding the obligation, we have used an alternative discount rate of 7.5%. In addition, the actuarial assumptions for mortality, healthcare trend and probability of electing coverage were modified for this valuation.

If all the assumptions of the June 30, 2015 report had been met, we would have expected the Unfunded Actuarial Accrued Liability to increase from $76,872,278, to $83,771,565. The difference between the expected Unfunded Actuarial Accrued Liability and the actual Liability of $77,503,160 is primarily due to the changes in the actuarial assumptions. The new assumptions are based on our 2015 Experience Study of over 36,000 Chapter 32 participants over a 5 year period.

Section II provides a summary of the principal valuation results. Section V provides a projection of funding amounts.

Daniel Sherman is an Associate of the Society of Actuaries. He is a Member of the American Academy of Actuaries and meets the Qualification Standards of the Academy to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

Respectfully Submitted,

SHERMAN ACTUARIALS SERVICES, LLC

Daniel W. Sherman

September 24, 2017

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Daniel Sherman, ASA, MAAA Date

CEO

SECTION II – REQUIRED INFORMATION

		Partial Prefunding 4.0%	Full Prefunding 7.5%	
a)	Actuarial valuation date	June 30, 2017	June 30, 2017	Difference
b)	Actuarial Value of Assets	$ 2,486,586	$ 2,486,586	$ 0
c)	Actuarial Accrued Liability			
	Active participants	$ 47,510,897	$ 23,186,730	$ 24,324,167
	Retired participants	32,478,849	24,071,879	8,406,970
	Total	$ 79,989,746	$ 47,258,609	$ 32,731,137
d)	Unfunded Actuarial Liability "UAL" [c - b]	$ 77,503,160	$ 44,772,023	$ 32,731,137
e)	Funded ratio [b / c]	3.1%	5.3%	-2.2%
f)	Annual covered payroll	$ 58,972,529	$ 58,972,529	
g)	UAL as percentage of covered payroll	131.4%	75.9%	
h)	Normal Cost for fiscal year 2017	$ 3,101,048	$ 1,192,298	$ 1,908,750
i)	Amortization of UAL for fiscal year 2017 *	$ 2,583,439	$ 2,315,506	$ 267,933
j)	Annual Required Contribution "ARC" for fiscal year 2017 [h + i]	$ 5,684,487	$ 3,507,804	$ 2,176,683
k)	Expected benefit payments	$ 2,566,904	$ 2,566,904	$ 0

* 30-year amortization, increasing 4.0% per year

SECTION III –MEDICAL PREMIUM AND MEMBERSHIP DATA

Monthly Town Shared Premiums effective July 1, 2017

Health benefits are available to retirees through a number of plans. The following rates include associated administrative fees, if applicable.

Medicare Plans (Individual):	**Gross Premium**	**Cost Sharing**	**6/30/2017 Headcount**
HPHC Medicare Enhanced (pre-6/30/2004)	$389.12	30.0%	253
HPHC Medicare Enhanced (post-6/30/2004 pre-6/30/2014)	$389.12	41.5%	170
HPHC Medicare Enhanced (post-6/30/2014)	$389.12	50.0%	29
Tufts Medicare Preferred (pre-6/30/2004)	$296.00	30.0%	2
Tufts Medicare Preferred (post – 6/30/2004)	$296.00	50.0%	10
Medicare Part B	$104.90	50.0%	467
Harvard Medicare Supplemental - Reduced	$355.42	30.0%	3
Non-Medicare Plans:			
HPHC PPO			
Individual	$948.51	50.0%	5
Family	$2,560.92	50.0%	1
HPHC HMO (pre-6/30/2004)			
Individual	$751.47	30.0%	20
Individual +1	$751.47	30.0%	2
Family	$2,029.03	30.0%	1
HPHC HMO (post-6/30/2004 / pre-6/30/2014)			
Individual	$751.47	41.5%	22
Individual +1	$751.47	41.5%	4
Family	$2,029.03	41.5%	5
HPHC HMO (post-6/30/2014)			
Individual	$751.47	50.0%	11
Individual +1	$751.47	50.0%	6
Family	$2,029.03	50.0%	2

SECTION III – MEDICAL PREMIUM AND MEMBERSHIP DATA (Continued)

Number of Participants	**Assessor's Office**	**Board of Health**	**Building Dept.**	**Dept. of Public Works**	**Engineering**	**Fire**	**Police**	**Recreation Dept.**
Actives	3	3	5	63	5	47	43	18
Retirees and Beneficiaries*	9	4	2	49	9	51	49	4
Total	12	7	7	112	14	98	92	22
Accrued Liability @ 4%								
Active	138,023	172,107	333,237	4,218,204	288,261	4,108,979	3,530,183	1,036,725
Retired	368,434	186,032	69,839	2,269,398	425,453	3,053,690	2,809,805	261,448
Total	506,457	358,139	403,076	6,487,602	713,714	7,162,669	6,339,988	1,298,173
Assets	15,744	11,133	12,530	201,676	22,187	222,661	197,087	40,355
Unfunded Accrued Liability	490,713	347,006	390,546	6,285,926	691,527	6,940,008	6,142,901	1,257,818
Annual Required Contribution @ 4%								
Normal Cost with interest	6,629	13,735	16,740	159,350	14,195	141,155	175,826	66,355
Amortization of UAL with interest	16,357	11,567	13,018	209,531	23,051	231,334	204,763	41,927
Total	22,986	25,302	29,758	368,881	37,246	372,489	380,589	108,282
Pay-as-You-Go	39,559	17,554	10,282	210,012	33,192	234,321	196,478	16,715
Accrued Liability @ 7.5%								
Active	75,090	89,313	193,677	2,359,990	147,818	2,223,625	1,808,914	432,400
Retired	293,384	147,764	58,127	1,732,543	322,416	2,187,310	2,038,441	192,624
Total	368,474	237,077	251,804	4,092,533	470,234	4,410,935	3,847,355	625,024
Assets	19,388	12,474	13,249	215,335	24,742	232,088	202,435	32,887
Unfunded Accrued Liability	349,086	224,603	238,555	3,877,198	445,492	4,178,847	3,644,920	592,137
Annual Required Contribution @ 7.5%								
Normal Cost with interest	2,876	7,282	9,048	74,459	5,780	50,586	63,323	24,035
Amortization of UAL with interest	18,054	11,616	12,338	200,520	23,040	216,120	188,507	30,624
Total	20,930	18,898	21,386	274,979	28,820	266,706	251,830	54,659
Pay-as-You-Go	39,559	17,554	10,282	210,012	33,192	234,321	196,478	16,715

Note: For the amortization of UAL, assets were allocated among the departments in proportion to Accrued Liablility
* Participants who have elected to receive Town subsidized benefits.

SECTION III – MEDICAL PREMIUM AND MEMBERSHIP DATA (Continued)

Number of Participants	Retirement	School	Town Clerk	Water Sewer Enterprise	All Others	Total
Actives	1	581	4	39	16	828
Retirees and Beneficiaries*	-	398	5	29	10	619
Total	1	979	9	68	26	1,447
Accrued Liability @ 4%						
Active	82,447	30,468,314	139,964	1,196,850	1,797,604	47,510,897
Retired	-	20,948,667	157,943	498,513	1,429,626	32,478,849
Total	82,447	51,416,981	297,907	1,695,363	3,227,230	79,989,746
Assets	2,563	1,598,364	9,261	52,703	100,323	2,486,586
Unfunded Accrued Liability	79,884	49,818,617	288,646	1,642,660	3,126,907	77,503,160
Annual Required Contribution @ 4%						
Normal Cost with interest	3,303	2,387,097	9,534	31,184	75,943	3,101,048
Amortization of UAL with interest	2,663	1,660,621	9,622	54,755	104,230	2,583,439
Total	5,966	4,047,718	19,156	85,939	180,173	5,684,487
Pay-as-You-Go	208	1,632,309	13,763	41,028	121,482	2,566,904
Accrued Liability @ 7.5%						
Active	46,009	14,054,561	73,921	640,491	1,040,922	23,186,730
Retired	-	15,522,498	125,171	372,169	1,079,430	24,071,879
Total	46,009	29,577,059	199,092	1,012,660	2,120,352	47,258,609
Assets	2,421	1,556,243	10,476	53,283	111,566	2,486,586
Unfunded Accrued Liability	43,588	28,020,816	188,616	959,377	2,008,786	44,772,023
Annual Required Contribution @ 7.5%						
Normal Cost with interest	1,843	900,964	3,936	14,139	34,026	1,192,298
Amortization of UAL with interest	2,254	1,449,172	9,755	49,617	103,890	2,315,506
Total	4,097	2,350,136	13,691	63,756	137,916	3,507,804
Pay-as-You-Go	208	1,632,309	13,763	41,028	121,482	2,566,904

Note: For the amortization of UAL, assets were allocated among the departments in proportion to Accrued Liablility
* Participants who have elected to receive Town subsidized benefits.

SECTION IV – REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL)	(b) - (a) Unfunded AAL (UAL)	(a) / (b) Funded Ratio	Annual Covered Payroll	[(b)-(a)] / (c) UAL as Percentage of Covered Payroll
July 1, 2008	0	110,278,479	110,278,479	0.00%	37,723,250	292.3%
June 30, 2011	375,000	93,333,604	92,958,604	0.40%	42,210,838	220.2%
June 30, 2013	751,874	60,106,276	59,354,402	1.25%	44,699,816	132.8%
June 30, 2015	1,482,917	78,355,195	76,872,278	1.89%	54,100,000	142.1%
June 30, 2017	2,486,586	79,989,746	77,503,160	3.11%	58,972,529	131.4%

These results are based on a discount rate of 3.50% for 2008 and 4.00% since 2011.

SECTION V – NET OPEB OBLIGATION

GASB Statement No. 45 requires the development of Annual OPEB Cost and Net OPEB Obligation (NOO). This development is shown in the following table.

DEVELOPMENT OF OPEB COST AND NET OPEB OBLIGATION (NOO)

Year Ending June 30	Annual Required Contribution	Interest on NOO	Amortization of NOO	Annual OPEB Cost (1)+(2)-(3)	Expected Contribution*	Change in NOO (4)-(5)	NOO Balance
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2015							26,139,056
2016	5,674,208	1,022,572	852,143	5,844,637	2,586,415	3,258,222	29,397,278
2017	5,684,487	1,175,891	979,909	5,880,469	2,806,368	3,074,101	32,471,379

*Includes $470,000, $350,000 and $350,000 contributions to Trust for FYE15 through FYE17, respectively.

SECTION VI – SCHEDULE OF EMPLOYER CONTRIBUTIONS

The Government Accounting Standards Board's Statement No. 45 "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" outlines various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs. Amortization of the unfunded actuarial liability is to be based on a schedule that extends no longer than 30 years. The contribution towards the amortization of the unfunded actuarial liability may be made in level payments or in payments increasing at the same rate as salary increases.

In the amortization schedules shown on the following pages, the amortization of the unfunded accrued liability is assumed to increase annually by 4.0%. The normal cost is expected to increase at the same rate as the assumed health care trend rate. The contributions were computed assuming that the contribution is paid at the beginning of the fiscal year. Projected benefit payments/employer contributions reflect only the benefit for those individuals now employed or retired, not any future entrants.

Paragraph 12 of GASB 45 stipulates that valuations must be performed at least biennially.

SECTION VI – SCHEDULE OF EMPLOYER CONTRIBUTIONS (Continued)*

Assumed Partial Prefunding Interest Rate of 4%

Fiscal Year Ending In	Normal Cost	Amortization of UAL	ARC	Expected Benefit Payments	Unfunded Liability
2017	3,101,048	2,583,439	5,684,487	2,456,368	77,503,160
2018	3,240,595	2,698,504	5,939,099	2,566,904	80,955,134
2019	3,386,422	2,817,021	6,203,443	2,743,081	84,510,615
2020	3,538,811	2,939,739	6,478,550	2,907,602	88,192,164
2021	3,698,057	3,067,066	6,765,123	3,071,795	92,011,984
2022	3,864,470	3,200,214	7,064,684	3,225,384	96,006,408
2023	4,038,371	3,338,210	7,376,581	3,409,813	100,146,297
2024	4,220,098	3,482,972	7,703,070	3,563,255	104,489,152
2025	4,410,002	3,637,214	8,047,216	3,723,601	109,116,425
2026	4,608,452	3,798,558	8,407,010	3,894,879	113,956,733
2027	4,815,832	3,968,566	8,784,398	4,070,149	119,056,974
2028	5,032,544	4,149,390	9,181,934	4,253,305	124,481,710
2029	5,259,008	4,344,014	9,603,022	4,444,704	130,320,417
2030	5,495,663	4,550,574	10,046,237	4,644,716	136,517,227
2031	5,742,968	4,770,177	10,513,145	4,853,728	143,105,315
2032	6,001,402	5,006,050	11,007,452	5,072,146	150,181,509
2033	6,271,465	5,253,796	11,525,261	5,300,392	157,613,876
2034	6,553,681	5,515,002	12,068,683	5,538,910	165,450,062
2035	6,848,597	5,793,422	12,642,019	5,788,161	173,802,649
2036	7,156,784	6,087,048	13,243,832	6,048,628	182,611,430
2037	7,478,839	6,397,317	13,876,156	6,320,816	191,919,524
2038	7,815,387	6,723,510	14,538,897	6,605,253	201,705,314
2039	8,167,079	7,068,205	15,235,284	6,902,490	212,046,156
2040	8,534,598	7,431,340	15,965,938	7,213,102	222,940,203
2041	8,918,655	7,818,208	16,736,863	7,537,691	234,546,253
2042	9,319,994	8,228,661	17,548,655	7,876,887	246,859,836
2043	9,739,394	8,663,584	18,402,978	8,231,347	259,907,507
2044	10,177,667	9,129,673	19,307,340	8,601,758	273,890,199
2045	10,635,662	9,619,764	20,255,426	8,988,837	288,592,919
2046	11,114,267	10,142,788	21,257,055	9,393,335	304,283,638
2047	11,614,409	10,697,300	22,311,709	9,816,035	320,919,003
2048	12,137,057	11,283,815	23,420,872	10,257,756	338,514,440

***** The contributions were computed assuming that the contribution is paid at the beginning of the fiscal year.

SECTION VI – SCHEDULE OF EMPLOYER CONTRIBUTIONS (Continued)*

Assumed Full Prefunding Interest Rate of 7.5%

Fiscal Year Ending In	Normal Cost	Amortization of UAL	ARC	Expected Benefit Payments	Unfunded Liability
2017	1,192,298	2,315,506	3,507,804	2,456,368	44,772,023
2018	1,245,951	2,408,126	3,654,077	2,566,904	45,640,756
2019	1,302,019	2,504,451	3,806,470	2,743,081	46,475,077
2020	1,360,610	2,604,629	3,965,239	2,907,602	47,268,423
2021	1,421,837	2,708,814	4,130,651	3,071,795	48,013,579
2022	1,485,820	2,817,167	4,302,987	3,225,384	48,702,622
2023	1,552,682	2,929,854	4,482,536	3,409,813	49,326,864
2024	1,622,553	3,047,048	4,669,601	3,563,255	49,876,786
2025	1,695,568	3,168,930	4,864,498	3,723,601	50,341,968
2026	1,771,869	3,295,687	5,067,556	3,894,879	50,711,016
2027	1,851,603	3,427,514	5,279,117	4,070,149	50,971,479
2028	1,934,925	3,564,615	5,499,540	4,253,305	51,109,762
2029	2,021,997	3,707,200	5,729,197	4,444,704	51,111,033
2030	2,112,987	3,855,488	5,968,475	4,644,716	50,959,121
2031	2,208,071	4,009,708	6,217,779	4,853,728	50,636,405
2032	2,307,434	4,170,096	6,477,530	5,072,146	50,123,700
2033	2,411,269	4,336,900	6,748,169	5,300,392	49,400,124
2034	2,519,776	4,510,376	7,030,152	5,538,910	48,442,966
2035	2,633,166	4,690,791	7,323,957	5,788,161	47,227,534
2036	2,751,658	4,878,423	7,630,081	6,048,628	45,726,998
2037	2,875,483	5,073,560	7,949,043	6,320,816	43,912,219
2038	3,004,880	5,276,502	8,281,382	6,605,253	41,751,558
2039	3,140,100	5,487,562	8,627,662	6,902,490	39,210,685
2040	3,281,405	5,707,064	8,988,469	7,213,102	36,252,357
2041	3,429,068	5,935,347	9,364,415	7,537,691	32,836,190
2042	3,583,376	6,172,761	9,756,137	7,876,887	28,918,407
2043	3,744,628	6,419,671	10,164,299	8,231,347	24,451,569
2044	3,913,136	6,676,458	10,589,594	8,601,758	19,384,291
2045	4,089,227	6,943,516	11,032,743	8,988,837	13,660,920
2046	4,273,242	7,221,209	11,494,451	9,393,335	7,221,209
2047	4,465,538	-	4,465,538	9,816,035	0
2048	4,666,487	-	4,666,487	10,257,756	0

* The contributions were computed assuming that the contribution is paid at the beginning of the fiscal year.

SCHEDULE A - ACTUARIAL ASSUMPTIONS AND METHODS

TOWN OF WINCHESTER, ALL GROUPS

Interest: Full Prefund: 7.50% per year, net of investment expenses
Partial Prefund: 4.00% per year, net of investment expenses

- Note: the 4.00% rate is a blend of a 7.5% full prefund rate and a 3.5% no prefund rate.

Actuarial Cost Method: Projected Unit Credit

Medical Care Inflation:

Year	Rate
2017	4.5%
2018	4.5%
2019 & after	4.5%

Amortization Period: 30-year level percent of pay assuming 4.0% increasing payments, closed basis for full prefunding. The amortization period is a specific number of years that is counted from one date, declining to zero with the passage of time. Under the partial funding approach, a 30-year open basis was used for the amortization. The amortization period is 30 years for all future valuations.

Participation: 75% of all active employees are assumed to participate in the retiree medical plan. 75% of current actives who terminate service after age 50 with at least 10 years of service are expected to elect medical coverage starting at age 65. 50% of employees are expected to elect life insurance at retirement.

Marital Status: 80% of male employees and 60% of female employees are assumed to have a covered spouse at retirement. Wives are assumed to be three years younger than their husbands.

SCHEDULE A - ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

Medical Plan Selection: Current retirees and spouses who are under age 65 are assumed to remain in their current medical plan until age 65. At age 65, they are assumed to participate in post 65 plans in the same proportions as current retirees over age 65 enrolled in Medicare plans. Current retirees and spouses over age 65 remain in their current medical plan until death.

Current active employees are not valued using their current medical plan. Rather they are assumed to elect medical plans at retirement in the same proportion as current retirees. For pre-65 payments a blend of pre-65 plans is used, and for post-65 payments a blend of post-65 Medicare plans is used.

Medical Premiums: It is assumed that future retirees participate in the same manner as current retirees. Current retirees over age 65 remain in their current medical plan until death for purposes of measuring their contributions. It is assumed that future retirees are Medicare eligible. It is furthermore assumed that all current retirees under 65 will participate in the Medicare plans in the same proportion as current retirees over 65. Per capita costs were developed from the Town developed monthly costs. Amounts to be received in the future for the Medicare Part D Retiree Drug Subsidy are not reflected in the valuation.

Medical Plan Costs: The estimated gross per capita incurred claim costs for all retirees and beneficiaries for 2017-18 at age 64 and 65 are $13,908 and $3,959, respectively. Medicare eligible retirees' per capita claims costs at age 65 is $3,559. It is assumed that future retirees participate in the same manner as current retirees. Employee cost sharing is based on current rates. Future cost sharing is based on the weighted average of the current cost sharing of retirees and beneficiaries.

Age-Based Morbidity: Medical costs are adjusted to reflect expected cost increases related to age. The increase in the net costs assumed to be:

Age	Annual Increase Retiree
49 and below	2.6%
50-54	3.2%
55-59	3.4%
60-64	3.7%
65-69	3.2%
70-74	2.4%
75-79	1.8%
80 and over	0.0%

SCHEDULE A - ACTUARIAL ASSUMPTIONS AND METHODS (Continued)
NON-TEACHERS

SEPARATIONS FROM ACTIVE SERVICE: The below tables represent values of the assumed annual rates of withdrawal, disability, death and service retirement:

Group 1 and 2

Age	Disability	Service Retirement Male	Service Retirement Female	Service Retirement Male Post 2012 Hire	Service Retirement Female Post 2012 Hire
25	0.0001				
30	0.0002				
35	0.0003				
40	0.0007				
45	0.0010				
50	0.0013	0.0360	0.1019		
55	0.0016	0.0477	0.0469		
60	0.0018	0.1057	0.0774	0.0477	0.0469
62	0.0019	0.1473	0.1168	0.0632	0.0509
65	0.0016	0.2615	0.1939	0.1057	0.0774
69	0.0014	0.2500	0.2000	0.2136	0.1708

Years of Service	Rates of Withdrawal
0	0.2800
5	0.1020
10	0.0650
15	0.0417
20	0.0400
25	0.0400
30+	0.0000

Group 4

Age	Disability	Service Retirements Pre 2012	Service Retirements Post 2012
25	0.0005		
30	0.0010		
35	0.0020		
40	0.0025		
45	0.0040	.0443	
50	0.0076	.0382	0.0191
55	0.0076	.1110	0.0370
60	0.0065	.1871	0.0936
62	0.0065	.2176	0.1741
65	0.0000	1.0000	0.2500

Years of Service	Rates of Withdrawal
0 - 1	0.150
2 - 3	0.125
4 - 5	0.100
6 - 7	0.075
8 - 9	0.050
10 - 19	0.060
20+	0.000

Mortality: It is assumed that both pre-retirement mortality and beneficiary mortality is represented by the RP-2014 Blue Collar Mortality with Scale MP-2016, fully generational. Mortality for retired members for Group 1 and 2 is represented by the RP-2014 Blue Collar Mortality Table set forward five years for males and 3 years for females, fully generational. Mortality for retired members for Group 4 is represented by the RP-2014 Blue Collar Mortality Table set forward three years for males, and six years for females, fully generational. Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years.

Mortality for disabled members for Group 4 is represented by the RP-2000 Mortality Table set forward two years. Generational adjusting is based on Scale MP-2016.

SCHEDULE A - ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

TEACHERS

The below tables represent values of the assumed annual rates of withdrawal, disability, death and service retirement:

Age	Disability
25	0.0002
30	0.0003
35	0.0006
40	0.0010
45	0.0015
50	0.0019
55	0.0024
60	0.0028
62	0.0030
65	0.0030
69	

Years of Service	Rates of Withdrawal
0	0.150
1	0.120
2	0.100
3	0.090
4	0.080
5	0.076
10	0.054
15	0.033
20	0.020
25	0.010
30+	0.000

	Male Service Retirement		Female Service Retirement	
Age	<20	20+	<20	20+
50	0.00	0.01	0.00	0.01
55	0.02	0.03	0.02	0.04
60	0.12	0.20	0.12	0.16
61	0.15	0.30	0.15	0.20
62	0.18	0.35	0.18	0.25
63	0.15	0.35	0.15	0.25
64	0.25	0.30	0.25	0.30
65	0.40	0.50	0.40	0.40
66	0.40	0.30	0.40	0.30
67	0.40	0.30	0.40	0.25
68	0.40	0.30	0.40	0.35
69	0.40	0.40	0.40	0.35
70	1.00	1.00	1.00	1.00

Teachers electing the increased benefit under Chapter 114 of the Acts of 2000 were assumed to have higher rates of retirement from ages 54 to 62 if their service was greater than 30 years. These rates are the same for males and females. The rate at age 54 is 0.035. The rate increases to 0.06 at age 55, 0.18 at age 56 and 0.30 at age 57. The rate for ages 58, 59 and 62 is 0.40. The rate for ages 60 and 61 is 0.35.

Mortality: It is assumed that both retiree mortality and beneficiary mortality is represented by the RP-2014 Mortality with Scale MP-2016, fully generational.

SCHEDULE B - SUMMARY OF PROGRAM PROVISIONS

Benefit Types:	**Medical Insurance:** Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans as summarized in Section III.
	Life Insurance: The Town of Winchester contributes 50% of the cost per month in the amount of $3.28 for retirees receiving the $4,000 basic life insurance.
Premiums:	The gross premiums and the cost sharing for the various plans are outlined in Section III.
Dependent Coverage:	Spouse benefits are payable for the lifetime of the spouse for those retired from active service.
Eligibility:	**Retirement:** Age 55 with 10 years of service, or 20 years of service. For a Group 1 employee hired on or after April 2, 2012, attainment of age 60 and completion of ten years of service. For a Group 2 employee hired on or after April 2, 2012, attainment of age 55 and completion of ten years of service. For a Group 4 employee hired on or after April 2, 2012, attainment of age 55.
	Termination: 50 with 10 years of service. Eligible for deferred commencement of benefits at age 65.
	Disability: 10 years of service and under age 55 for Ordinary. No age or service requirements for Accidental.
Chapter 32B, Section 18	The Town of Winchester has adopted Section 18, which requires all Medicare-eligible retirees and spouses to transfer to a Medicare extension plan.

SCHEDULE C – CONSIDERATION OF HEALTH CARE REFORM

Summary of Effects of Selected Provisions

Early Retiree Reinsurance Program – Effective 6/1/2010: Due to the short-term nature of the payments expected to be received under this program, there is no impact on long-term GASB 45 liabilities.

Removal of Lifetime Maximum: This does not apply since the current medical plans have no lifetime maximums.

Medicare Advantage Plans - Effective 1/1/2011: The law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. The Tufts plan is a Medicare Advantage plan, but the impact was not material due to the low number of participants.

Expansion of Child Coverage to Age 26: Since few retirees cover children on retiree health plans, this provision will likely have a relatively small effect on the gross benefit cost. We have not reflected the impact of any cost increase due to the expansion of coverage.

Medicare Part D Subsidy - Shrinking Medicare Prescription Drug "Donut Hole"- Starting 1/1/2011: RDS payments are not reflected as on ongoing offsetting item in GASB 45 valuations, and so no impact is reflected.

Excise Tax on High-Cost Employer Health Plans (aka Cadillac Tax) - Effective 1/1/2020: There is considerable uncertainty about how the tax would be applied, and considerable latitude in grouping of participants for tax purposes. We have estimated the impact and included an estimated tax in the liabilities.

Other: We have not identified any other specific provision of health care reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

SCHEDULE D - GLOSSARY OF TERMS

Actuarial accrued liability
That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of OPEB benefits and expenses which is not provided for by future Normal Costs and therefore is the value of benefits already earned.

Actuarial assumptions
Assumptions as to the occurrence of future events affecting OPEB costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided OPEB benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

Actuarial cost method
A procedure for determining the Actuarial Present Value of OPEB benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

Actuarial experience gain or loss
A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Amortization (of unfunded actuarial accrued liability)
That portion of the OPEB plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability.

Annual OPEB cost
An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

Annual required contributions of the employer (ARC)
The employer's periodic expense to a defined benefit OPEB plan, calculated in accordance with the parameters. It is the value of the cash contributions for a funded plan and the value of the expense entry in the profit and loss section of the financial statements.

Closed amortization period (closed basis)
A specific number of years that is counted from one date and, therefore, declines to zero with the passage of time. For example, if the amortization period initially is thirty years on a closed basis, twenty-nine years remain after the first year, twenty-eight years after the second year, and so forth. In contrast, an open amortization period (open basis) is one that begins again or is recalculated at each actuarial valuation date. Within a maximum number of years specified by law or policy (for example, thirty years), the period may increase, decrease, or remain stable.

Covered payroll
Annual compensation paid to active employees covered by an OPEB plan. If employees also are covered by a pension plan, the covered payroll should include all elements included in compensation on which contributions to the pension plan are based. For example, if pension contributions are calculated on base pay including overtime, covered payroll includes overtime compensation.

Defined benefit OPEB plan
An OPEB plan having terms that specify the benefits to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

Funded ratio
The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Funding policy
The program for the amounts and timing of contributions to be made by plan members, employer(s), and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by an OPEB plan.

Healthcare cost trend rate
The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

Investment return assumption (discount rate)
The rate used to adjust a series of future payments to reflect the time value of money.

Level dollar amortization method
The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.

Level percentage of projected payroll amortization method
Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases due to inflation; in dollars adjusted for inflation, the payments can be expected to remain level.

Net OPEB obligation
The cumulative difference since the effective date of this Statement between 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. It will be included as a balance sheet entry on the financial statements.

Normal cost
That portion of the Actuarial Present Value of OPEB benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. It is the value of benefits to be accrued in the valuation year by active employees.

OPEB-related debt
All long-term liabilities of an employer to an OPEB plan, the payment of which is not included in the annual required contributions of a sole or agent employer (ARC) or the actuarially determined required contributions of a cost-sharing employer. Payments generally are made in accordance with installment contracts that usually include interest. Examples include contractually deferred contributions and amounts assessed to an employer upon joining a multiple-employer plan.

Other postemployment benefits
Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

Pay-as-you-go
A method of financing a OPEB plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Required supplementary information (RSI)
Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.