

# Town and Board of Education of Hamden

Revised Actuarial Valuation and Review of Other  
Postemployment Benefits (OPEB) as of  
July 1, 2016 In accordance with GASB Statements No.  
43 and No. 45





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March 24, 2017

Mr. Salvatore DeCola  
Director of Finance  
Hamden Government Center  
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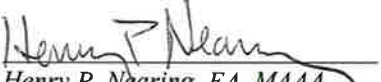
Dear Sal:

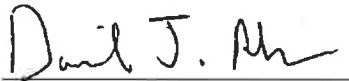
We are pleased to submit this **revised Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of July 1, 2016 under Governmental Accounting Standards Board Statements 43 and 45**. Please note that GASB Statement 43 was recently replaced by GASB Statement 74 which takes effect for fiscal years beginning after June 15, 2016. GASB 74 calculations and disclosures for fiscal year ending 2017 will be transmitted under a separate cover. **We revised the report to reflect our understanding that an OPEB trust was formally established and is in effect as of July 1, 2016**. The report summarizes the actuarial data used in the valuation and establishes the Annual Required Contribution (ARC) for the year ended June 30, 2017, and **revises the Net OPEB Obligation (NOO) as of June 30, 2016 to reflect the additional prefunding amounts to the OPEB Trust of \$300,000 as of June 30, 2016**. This report was based on the census data provided by Anthem and the Town and Board of Education of Hamden, asset values provided by Wells Fargo, and the terms of the Plan. The actuarial calculations were completed under the supervision of Henry P. Nearing, EA, MAAA, Vice President and Consulting Actuary, and Daniel J. Rhodes, FSA, MAAA, Vice President and Consulting Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in this valuation and described in Exhibit II are reasonably related to the experience of and the expectations for the Plan. The actuarial projections are based on these assumptions and the plan of benefits as summarized in Exhibit III.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:   
Henry P. Nearing, EA, MAAA  
Vice President and Consulting Actuary

  
Daniel J. Rhodes, FSA, MAAA  
Vice President and Consulting Actuary

cc: Theresa DeMattie

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## SECTION 1: Executive Summary for Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45

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### PURPOSE

This report presents the results of our actuarial valuation of Governmental Entity (the “Employer”) OPEB plan as of July 1, 2016. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants’ active working lifetimes.

### HIGHLIGHTS OF THE VALUATION

- The **unfunded actuarial accrued liability (UAAL)** as of July 1, 2016 is \$485,209,043, an increase of \$33,242,167 from the prior valuation UAAL of \$451,966,876. Net unfunded plan obligations had been expected to increase to \$468,930,755 due to normal plan operations. This \$16,278,288 difference between actual and expected unfunded actuarial accrued liabilities was the net effect of actuarial experience, valuation assumption changes, actuarial cost method changes, and plan changes.
- The **Net OPEB Obligation (NOO)** increased to \$170,972,584 for the year ending June 30, 2016. The NOO generally increases if the contributions in relation to the ARC are less than the ARC. The estimated contributions in relation to the ARC during the year ending June 30, 2016 consisted of benefit payments of approximately \$18,377,480 and contributions to the trust of \$300,000, compared to the ARC of \$39,778,717. Contributions in relation to the ARC totaled 47.0% of the ARC in the year ending June 30, 2016. Chart 5 shows the detailed derivation of the NOO as of June 30, 2016.
- The **Annual Required Contribution (ARC)** is \$39,778,717 for the year ending June 30, 2016 and \$32,443,099 for the year ending June 30, 2017.
- The **Annual OPEB Cost (AOC)** is \$35,570,962 for the year ending June 30, 2016 and \$30,784,123 for the year ending June 30, 2017.

**SECTION 1: Executive Summary for Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

*The key valuation results for the current and prior years are shown.*

**SUMMARY OF VALUATION RESULTS**

	<b>July 1, 2016</b>	<b>July 1, 2014</b>	
<b>Actuarial Accrued Liability (AAL)</b>	\$485,508,647	\$451,966,876	
<b>Actuarial Value of Assets</b>	299,604	0	
<b>Unfunded Actuarial Accrued Liability</b>	\$485,209,043	\$451,966,876	
<b>Annual Required Contribution (ARC) for Fiscal Year Ending:</b>	<b>June 30, 2017</b>	<b>June 30, 2016*</b>	<b>June 30, 2015</b>
Normal cost (beginning of year)	\$8,618,089	\$8,426,300	\$8,102,212
Amortization of the unfunded actuarial accrued liability	23,188,871	29,822,466	28,502,957
Adjustment for timing	<u>636,139**</u>	<u>1,529,951</u>	<u>1,464,207</u>
Total Annual Required Contribution, including adjustment for timing	\$32,443,099	\$39,778,717	\$38,069,376
<b>Annual OPEB Cost (AOC) for Fiscal Year Ending:</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>June 30, 2015</b>
Annual Required Contributions	\$32,443,099	\$39,778,717	\$38,069,376
Interest on Net OPEB Obligations	6,838,903	6,163,164	5,473,976
ARC Adjustments	<u>(8,497,879)</u>	<u>(10,370,919)</u>	<u>(8,975,519)</u>
Total Annual OPEB Cost	\$30,784,123	\$35,570,962	\$34,567,833

\* Projected from July 1, 2014 valuation.

\*\*Assumes payment in the middle of the fiscal year (previously, end of fiscal year).

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**SECTION 1: Executive Summary for Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**SUMMARY OF VALUATION RESULTS – TOWN**

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	<b>July 1, 2016</b>	<b>July 1, 2014</b>
<b>Actuarial Accrued Liability (AAL)</b>	\$262,605,045	\$251,165,178
<b>Actuarial Value of Assets *</b>	<u>162,052</u>	<u>0</u>
<b>Unfunded Actuarial Accrued Liability</b>	\$262,442,993	\$251,165,178
<b>Annual Required Contribution (ARC) for Fiscal Year Ending:</b>	<b>June 30, 2017</b>	<b>June 30, 2015</b>
Normal cost (beginning of year)	\$5,275,602	\$5,729,185
Amortization of the unfunded actuarial accrued liability	12,542,546	15,839,546
Adjustment for timing	<u>356,363**</u>	<u>862,749</u>
Total Annual Required Contribution, including adjustment for timing	\$18,174,511	\$22,431,480

\* Asset amounts were prorated based on total Accrued Liability

\*\* Assumes payment in the middle of the fiscal year (previously, end of fiscal year).

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**SECTION 1: Executive Summary for Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**SUMMARY OF VALUATION RESULTS – BOARD OF EDUCATION**

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	<b>July 1, 2016</b>	<b>July 1, 2014</b>
<b>Actuarial Accrued Liability (AAL)</b>	\$222,903,602	\$200,801,698
<b>Actuarial Value of Assets *</b>	<u>137,552</u>	<u>0</u>
<b>Unfunded Actuarial Accrued Liability</b>	\$222,766,050	\$200,801,698
<b>Annual Required Contribution (ARC) for Fiscal Year Ending:</b>	<b>June 30, 2017</b>	<b>June 30, 2015</b>
Normal cost (beginning of year)	\$3,342,487	\$2,373,027
Amortization of the unfunded actuarial accrued liability	10,646,325	12,663,411
Adjustment for timing	<u>279,776**</u>	<u>601,458</u>
Total Annual Required Contribution, including adjustment for timing	\$14,268,588	\$15,637,896

\* Asset amounts were prorated based on total Accrued Liability

\*\* Assumes payment in the middle of the fiscal year (previously, end of fiscal year).

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**SECTION 1: Executive Summary for Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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March 24, 2017


**ACTUARIAL CERTIFICATION**

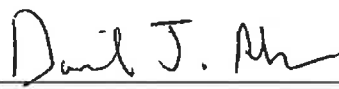
This is to certify that Segal Consulting, a Member of The Segal Group, Inc. has conducted an actuarial valuation of certain benefit obligations of Town and Board of Education of Hamden's other postemployment benefit programs as of July 1, 2016, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements 43 and 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by the Town and Board of Education and reliance on asset, participant, premium, claims and expense data provided by the Town and Board of Education or from vendors employed by the Town and Board of Education. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements 43 and 45 with respect to the benefit obligations addressed. Please note that GASB Statement 43 was recently replaced by GASB Statement 74 which takes effect for fiscal years beginning after June 15, 2016. The signing actuaries are members of the American Academy of Actuaries, and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.

By:   
Henry P. Nearing, EA, MAAA  
Vice President and Consulting Actuary

  
Daniel J. Rhodes, FSA, MAAA  
Vice President and Consulting Actuary



**SECTION 2: Valuation Results for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

The actuarial accrued liability shows that portion of the liability allocated to periods prior to the valuation date by the actuarial cost method. The chart below shows the portion covered by retiree contributions, and the liability broken down by participant category.

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**CHART 1**

**Actuarial Accrued Liability (AAL) and Unfunded AAL (UAAL)**

	July 1, 2016	July 1, 2014
<b>Participant Category</b>		
Current retirees, beneficiaries, and dependents	\$354,875,380	\$315,669,262
Current active members	<u>130,633,267</u>	<u>136,297,614</u>
Total	485,508,647	451,966,876
<b>Effect of Retiree Contributions</b>		
Actuarial accrued liability before reduction for retiree contributions	\$537,975,418	\$466,494,930
Less projected retiree contributions	<u>76,838,074</u>	<u>33,952,358</u>
Net employer actuarial accrued liability	\$461,137,344	\$432,275,572
Actuarial accrued liability attributable to excise tax	24,371,303	19,424,304
Actuarial value of assets	<u>299,604</u>	<u>0</u>
Unfunded actuarial accrued liability	\$485,209,043	\$451,966,876
<b>Development of Unfunded Actuarial Accrued Liability</b>		
1. Unfunded actuarial accrued liability as of prior valuation	\$451,966,876	\$439,980,586
2. Employer normal cost at beginning of year (for two years)	16,528,512	16,977,014
3. Total employer contributions at beginning of year (for two years)*	(36,015,614)	(34,856,945)
4. Interest	<u>36,450,981</u>	<u>35,585,825</u>
5. Expected unfunded actuarial accrued liability	468,930,755	457,686,480
6. Change due to the combined effect of actuarial experience, updated assumptions and methods	<u>16,278,288</u>	<u>(5,719,604)</u>
7. Unfunded actuarial accrued liability as of beginning of fiscal year	<u>\$485,209,043</u> **	<u>\$451,966,876</u>

\* Expected benefit payments, plus \$300,000 in additional prefunding

\*\* Includes adjustment to reflect our understanding that an OPEB trust was in effect as of July 1, 2016

**SECTION 2: Valuation Results for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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The Annual Required Contribution (ARC) is the amount calculated to determine the annual cost of the OPEB plan for accounting purposes as if the plan were being funded through contributions to a trust fund. The GASB standards cannot require the contributions actually be made to a trust fund. The ARC is simply a device used to measure annual plan costs on an accrual basis. The calculation consists of adding the Normal Cost of the plan to an amortization payment. The resulting sum is then adjusted to the start of the accounting period and further adjusted as if the annual cost were to be contributed in a single payment at the end of the year.

The amortization payment was based on a closed 30-year amortization of the Unfunded Actuarial Accrued Liability on a level dollar basis (22 years remaining). Effective July 1, 2016, the amortization payments are projected to increase at 3.5% per year.

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

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**CHART 2**

**Determination of Annual Required Contribution (ARC) – Payable Throughout Fiscal Year**

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Cost Element	Fiscal Year Beginning July 1, 2016 and Ending June 30, 2017	Fiscal Year Beginning July 1, 2014 and Ending June 30, 2015
1. Normal cost	\$8,618,089	\$8,102,212
2. Amortization of the unfunded actuarial accrued liability (30 years*)	23,188,871	28,502,957
3. Adjustment for timing	<u>636,139**</u>	<u>1,464,207</u>
4. Total Annual Required Contribution (ARC)	<u>\$32,443,099</u>	<u>\$38,069,376</u>

\*22 years remaining as of July 1, 2016.

\*\*Assumes payment in the middle of the fiscal year (previously, end of fiscal year).

**SECTION 2: Valuation Results for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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The Annual OPEB Cost (AOC) adjusts the ARC for timing differences between the ARC and contributions in relation to the ARC. The AOC is the cost of OPEB actually booked as an expense for the Fiscal Year under GASB 45.

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

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**CHART 2 (continued)**

**Determination of Annual OPEB Cost (AOC) – Payable Throughout Fiscal Year**

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Cost Element	Fiscal Year Beginning July 1, 2016 and Ending June 30, 2017	Fiscal Year Beginning July 1, 2014 and Ending June 30, 2015
1. Annual Required Contribution	\$32,443,099	\$38,069,376
2. Interest on Beginning of Year Net OPEB Obligation (NOO)	6,838,903	5,473,976
3. ARC adjustment	<u>(8,497,879)</u>	<u>(8,975,519)</u>
4. Annual OPEB Cost	<u>\$30,784,123</u>	<u>\$34,567,833</u>

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**SECTION 2: Valuation Results for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

For GASB 43 (plan reporting) purposes, the schedule of employer contributions compares actual contributions to the ARC. This schedule is for illustration purposes only, given that GASB 43 was recently replaced by GASB 74, which takes effect for fiscal years after June 15, 2016. For GASB 45 (employer reporting) purposes, the schedule of

employer contributions compares actual contributions to the AOC. Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**CHART 3**

**Required Supplementary Information – Schedule of Employer Contributions**

<b>Fiscal Year Ended June 30</b>	<b>Annual Required Contributions *</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$30,659,975	\$11,653,382**	34.6%
2010	30,951,154	11,051,962**	35.7%
2011	32,076,366	12,330,071**	38.4%
2012	34,822,130	15,847,243**	45.5%
2013	36,186,117	14,696,649	40.6%
2014	37,757,368	17,669,283**	46.8%
2015	38,069,376	17,338,134**	45.5%
2016	39,778,717	18,677,480***	47.0%
2017	N/A	N/A	N/A

<b>Fiscal Year Ended June 30</b>	<b>Annual OPEB Cost *</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$33,659,975	\$11,653,382**	34.6%
2010	30,193,936	11,051,962**	36.6%
2011	30,937,360	12,330,071**	39.9%
2012	33,055,026	15,847,243**	47.9%
2013	33,920,115	14,696,649	43.3%
2014	34,884,722	17,669,283**	50.7%
2015	34,567,833	17,338,134**	50.2%
2016	35,570,962	18,677,480***	52.5%
2017	30,781,212	N/A	N/A

\* Includes an interest adjustment to the end of the year and expected benefits.

\*\* Expected benefit payments

\*\*\* Includes \$300,000 in additional prefunding contributions to the trust

**SECTION 2: Valuation Results for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**CHART 4**

**Required Supplementary Information – Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) – (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) – (a) / (c)]</b>
7/1/2008	\$0	\$366,234,442	\$366,234,442	0%	N/A	N/A
7/1/2009	0	344,724,721	344,724,721	0%	N/A	N/A
7/1/2010	0	--	--	0%	N/A	N/A
7/1/2011	0	--	--	0%	N/A	N/A
7/1/2012	0	439,980,586	439,980,586	0%	N/A	N/A
7/1/2013	0	--	--	0%	N/A	N/A
7/1/2014	0	451,966,876	451,966,876	0%	N/A	N/A
7/1/2015	0	--	--	0%	N/A	N/A
7/1/2016	299,604	485,508,647	485,209,043	0.06%	N/A	N/A

**SECTION 2: Valuation Results for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

The Net OPEB obligation measures the accumulated differences between the annual OPEB cost and the actual contributions in relation to the ARC.

Effective July 1, 2016, the Actuarial Cost Method was changed to Entry Age Normal as a level percent of pay (prior to July 1, 2016, Projected Unit Credit Cost Method was used).

**CHART 5**

**Required Supplementary Information – Net OPEB Obligation (NOO)**

Actuarial Valuation Date	Fiscal Year End	Annual Required Contribution (a)	Interest on Existing NOO (b)	ARC Adjustment (c)	Annual OPEB Cost (a) + (b) + (c) (d)	Actual Contribution Amount (e)	Net Increase in NOO (d) – (e) (f)	NOO as of Fiscal Year (g)
7/1/2008	6/30/2009	\$30,659,975	--	--	--	--	--	\$45,453,452
7/1/2009	6/30/2010	30,951,154	\$1,818,138	(\$2,575,356)	\$30,193,936	\$11,051,962*	\$19,141,974	64,595,426
7/1/2009	6/30/2011	32,076,366	2,583,817	(3,722,823)	30,937,360	12,330,071*	18,607,289	83,202,715
7/1/2012	6/30/2012	34,822,130	3,328,109	(5,095,213)	33,055,026	15,847,243*	17,207,783	100,410,498
7/1/2012	6/30/2013	36,186,117	4,016,420	(6,282,422)	33,920,115	14,696,649	19,223,466	119,633,964
7/1/2012	6/30/2014	37,757,368	4,785,359	(7,658,005)	34,884,722	17,669,283*	17,215,439	136,849,403
7/1/2014	6/30/2015	38,069,376	5,473,976	(8,975,519)	34,567,833	17,338,134*	17,229,699	154,079,102
7/1/2014	6/30/2016	39,778,717	6,163,164	(10,370,919)	35,570,962	18,677,480**	16,893,482	170,972,584
7/1/2016	6/30/2017	32,443,099	6,838,903	(8,497,879)	30,784,123	N/A	N/A	N/A

\* Expected benefit payments

\*\* Includes \$300,000 in additional prefunding contributions to the trust

**SECTION 3: Supplemental Valuation Details for the Town and Board of Education of Hamden July 1, 2016  
Measurement Under GASB 43 and 45**

*This exhibit summarizes the participant data used for the current and prior valuations.*

**EXHIBIT A  
Summary of Participant Data**

	<b>July 1, 2016</b>	<b>July 1, 2014</b>
<b>Retirees</b>		
Number of retirees and disableds	1,206	1,241
Average age of retirees and disableds	72.82	72.16
Number of spouses	419	423
<b>Surviving Spouses</b>		
Number	43	48
Average age	75.36	74.62
<b>Active Participants</b>		
Number	1,240 *	843
Average age	46.93	49.09
Average years of service	11.52	12.89

*\* Includes teachers hired after 7/1/1999 (previously, this group was not included)*

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**EXHIBIT I**

**Summary of Required Supplementary Information**

<b>Valuation date</b>	July 1, 2016
<b>Actuarial cost method</b>	Entry Age Normal, Level Percent of Pay (previously, Projected Unit Credit)
<b>Amortization method</b>	Payments increasing at 3.5%, closed, 30 years (previously, level dollar)
<b>Remaining amortization period</b>	22 years as of July 1, 2016
<b>Asset valuation method</b>	Market value

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**Actuarial assumptions:**

Investment rate of return	4.0%
Inflation rate	2.0%
Payroll growth rate	3.5%
Non-Medicare Medical cost trend rate	6.5% graded to 5.0% over 3 years
Medicare Medical cost trend rate	5.5% graded to 5.0% over 1 years
Drug cost trend rate	9.5% graded to 5.0% over 9 years
Dental trend rate	4.0%
Administrative expense trend rate	3.0%
ACA excise tax threshold trend rate	3.5% in 2018; 2.5% thereafter

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**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**EXHIBIT II**

**Actuarial Assumptions and Actuarial Cost Method**

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<b>Data:</b>	Detailed census data, premium data and/or claim experience, and summary plan descriptions for OPEB were provided by the employer and by Anthem.
<b>Actuarial Cost Method:</b>	Entry Age Normal, Level Percent of Pay (previously, Projected Unit Credit)
<b>Asset Valuation Method:</b>	Market Value
<b>Measurement Date:</b>	July 1, 2016
<b>Discount Rate:</b>	4.0%
<b>Payroll Growth Rate:</b>	3.5%

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**Mortality Rates:**

*Healthy:* RP 2000 Combined Healthy projected 24 years with scale BB

*Disabled:* RP 2000 Disabled Retiree projected 24 years with scale BB

The RP-2000 mortality tables, projected to the 2016 valuation date, reasonably reflect the projected mortality experience of the Plan as of the measurement date. The additional projection of eight years is a provision made for future mortality improvement.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

**Sample Termination Rates before Retirement:**

*Rate (%) for Teachers*

Age	Mortality *		Disability		Withdrawal	
	Male	Female	Male	Female	Male	Female
20	0.03%	0.02%	0.03%	0.05%	1.50%	4.00%
25	0.04	0.02	0.03	0.05	1.50	4.00
30	0.04	0.03	0.03	0.04	1.50	4.00
35	0.08	0.05	0.03	0.04	1.50	3.50
40	0.11	0.07	0.05	0.07	1.50	2.30
45	0.15	0.11	0.12	0.12	1.59	1.50
50	0.21	0.17	0.24	0.26	2.04	2.00
55	0.36	0.27	0.54	0.44	3.44	2.50
60	0.67	0.51	0.96	0.50	4.00	2.90

**Sample Termination Rates before Retirement:**

*Rate (%) for Police & Fire*

Age	Mortality *		Disability	Withdrawal
	Male	Female	All Lives	All Lives
20	0.03%	0.02%	0.12%	5.44%
25	0.04	0.02	0.17	4.89
30	0.04	0.03	0.22	3.70
35	0.08	0.05	0.29	2.35
40	0.11	0.07	0.44	1.13
45	0.15	0.11	0.72	0.27
50	0.21	0.17	1.21	0.00
55	0.36	0.27	2.02	0.00
60	0.67	0.51	3.25	0.00

\* Mortality rates shown are before generational projection

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

**Sample Termination Rates before Retirement:**

*Rate (%) for All Other Employees*

Age	Mortality *		Disability	Withdrawal
	Male	Female	All Lives	All Lives
20	0.03%	0.02%	0.06%	16.32%
25	0.04	0.02	0.09	14.68
30	0.04	0.03	0.11	11.11
35	0.08	0.05	0.15	7.05
40	0.11	0.07	0.22	3.38
45	0.15	0.11	0.36	0.80
50	0.21	0.17	0.61	0.00
55	0.36	0.27	1.01	0.00
60	0.67	0.51	1.63	0.00

*\* Mortality rates shown are before generational projection*

**Retirement Rates:**

All Other Employees		Policemen and Firemen		Teachers		
Age	Rate (%)	Age	Rate (%)*	Rate (%)		
				Male	Female	
55-61	5	48-59	10	50-54	27.5	27.5
62-64	15	60-64	25	55-59	38.5	27.5
65	75	65	100	60	22.0	27.5
66-69	50			61-62	25.3	27.5
70	100			63-64	27.5	27.5
				65	36.3	32.5
				66-69	27.5	32.5
				70-79	100.0	32.5
				80 and older	100.0	100.0

*\* Rates start upon later of reaching 15 years of service or age 48.*

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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<b>Participation Election:</b>	<p>For employees contributing 100% of premiums (Security group and Teachers hired after 7/1/1999), 80%. For all others, 90% of employees who currently have medical coverage were assumed to elect medical and dental insurance coverage.</p> <p>100% of employees were assumed to elected life insurance coverage.</p>
<b>Coverage Election:</b>	<p><b>Pre-65:</b> All claims are self-funded</p> <p><b>Post-65:</b> All current retirees age 65+ are valued on actual elections.</p> <p>In the Police group, current retirees under age 65 and future retirees are assumed to remain self-funded. For the Fire group, all future retirees are assumed to elect the Group Retiree Plan F with the PDP rider. All other Town groups are assumed to elect the BC65 Low Option with BS65 Plan 83 and Major Medical.</p> <p>In the Board of Education group, current retirees under age 65 and future retirees are assumed to elect the BC65 High Option with BS65 Plan 81 and Major Medical.</p>
<b>Medicare Eligibility:</b>	<p>All current retirees under age 65 and future retirees are assumed to be eligible for Medicare.</p> <p>Claims for current retirees age 65 and over are blended based on current Medicare participation for this group.</p>
<b>Dependents:</b>	<p>Demographic data was available for spouses of current retirees. For future retirees, husbands were assumed to be three years older than their wives. 80% of future male retirees and 60% of future female retirees who elect to continue their health coverage at retirement were assumed to have an eligible spouse who also opts for health coverage at that time.</p>

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Per Capita Cost Development:**

*Insured Plans*

Per capita costs were based on the fully-insured premium rates effective January 1, 2016, trended to the midpoint of the valuation year at the assumed trend rates. For plans that are experience rated, actuarial factors were then applied to the weighted average cost to estimate individual retiree and spouse costs by age and by gender.

*Self-Funded Plans*

Per capita claims costs were based on the monthly paid claims experience by participant group and by coverage (medical, prescription drug, and dental) for the period January 1, 2014 through November 30, 2015. Claims were adjusted as follows:

- paid claims were multiplied by a factor to yield an estimate of incurred claims,
- total claims were divided by the number of adult members to yield a per capita claim cost, and
- the per capita claim cost was trended to the midpoint of the valuation year at the assumed trend rates.

Per capita claims for each plan year were then combined by taking a weighted average. The weights used in this average account for a number of factors including each plan year's volatility of claims experience and distance to the valuation year. Actuarial factors were then applied to the weighted average cost to estimate individual retiree and spouse costs by age and by gender.

**Per Capita Health Costs:**

2016-2017 medical and prescription drug claims costs, excluding assumed expenses, are shown in the tables on the next page for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

**Current Retirees Under Age 65 and All Actives:**

*Self-Funded Benefits - Town:*

Age	Medical				Prescription Drug			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
50	\$8,710	\$9,921	\$6,084	\$7,965	\$2,211	\$2,518	\$1,544	\$2,022
55	10,344	10,679	8,141	9,220	2,625	2,711	2,066	2,340
60	12,284	11,511	10,898	10,694	3,118	2,922	2,766	2,714
64	14,093	12,211	13,757	12,036	3,577	3,099	3,492	3,055

Medical costs shown above are scaled by 0.9979 for Fire employees.

*Self-Funded Benefits - BOE:*

Age	Medical				Prescription Drug			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
50	\$8,665	\$9,870	\$6,052	\$7,925	\$3,088	\$3,517	\$2,157	\$2,824
55	10,290	10,624	8,099	9,173	3,667	3,786	2,886	3,269
60	12,221	11,452	10,842	10,639	4,355	4,081	3,863	3,791
64	14,021	12,148	13,687	11,974	4,996	4,329	4,877	4,267

*Insured Benefits – Town (non-police) & BOE upon attaining age 65:*

Non-police retirees over age 65 are assumed to receive the experience-rated Major Medical and fully pooled BC65 Low Option with BS65 Plan 83 (Town), Group Retiree Plan F with PDP Rider (Fire), or BC65 High Option with BS65 Plan 81 (BOE) benefits described on page 21.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

**Current Retirees Under Age 65 and All Actives (Continued):**

*Self-Funded Benefits – Police upon attaining age 65:*

Age	Medical				Prescription Drug			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
65	\$3,731	\$3,171	\$3,731	\$3,171	\$3,703	\$3,148	\$3,703	\$3,148
70	4,324	3,418	4,324	3,418	4,292	3,392	4,292	3,392
75	4,660	3,679	4,660	3,679	4,625	3,651	4,625	3,651

**Current Retirees Age 65 and Over:**

(reflects a weighted average between Medicare-eligible and non-Medicare eligible retirees currently over age 65)

*Self-Funded Benefits - Town:*

Age	Medical				Prescription Drug			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
65	\$7,026	\$5,972	\$7,026	\$5,972	\$3,703	\$3,148	\$3,703	\$3,148
70	8,143	6,436	8,143	6,436	4,292	3,392	4,292	3,392
75	8,775	6,928	8,775	6,928	4,625	3,651	4,625	3,651

*Self-Funded Benefits - BOE:*

Age	Medical				Prescription Drug			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
65	\$5,807	\$4,936	\$5,807	\$4,936	\$5,172	\$4,396	\$5,172	\$4,396
70	6,730	5,319	6,730	5,319	5,994	4,738	5,994	4,738
75	7,253	5,726	7,253	5,726	6,460	5,100	6,460	5,100

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Current Retirees Age 65 and Over (Continued):**

*Insured Benefits:*

**Experience-Rated Major Medical:**

Age	Medical			
	Retiree		Spouse	
	Male	Female	Male	Female
65	\$2,146	\$1,824	\$2,146	\$1,824
70	2,487	1,966	2,487	1,966
75	2,680	2,116	2,680	2,116

**Fully Pooled Plans:**

BC65 Low Option with BS65 Plan 83 (Town):	\$1,419
BC65 High Option with BS65 Plan 81 (BOE):	\$2,704
CarePlus:	\$5,225
Group Retiree Plan F with PDP Rider:	\$5,252

**All Participants:**

**Dental:**

Town:	\$422
Board of Education:	\$479

**Dental and Medicare Pooled Rates:**

Per-capita costs were based on actual premium rates with no age adjustments. It is assumed that there is no implicit rate of subsidy associated with these benefits.



**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Per Capita Retiree Contributions:** Retiree contributions are based on the cost-sharing outlined in the plan provisions and the following premiums and allocation rates:

**Self-Funded Benefits:**

	<b>Town</b>	<b>BOE</b>
Medical:	\$8,874	\$8,399
Prescription drug:	\$2,939	\$4,616

**Experience-Rated Major Medical Plan:** \$2,451

**Fully Pooled Plans:**

BC65 Low Option with BS65 Plan 83 (Town):	\$1,419
BC65 High Option with BS65 Plan 81 (BOE):	\$2,704
CarePlus:	\$5,225
Group Retiree Plan F with PDP Rider:	\$5,252

**Dental:**

Town:	\$496
BOE:	\$555

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

**Health Care Cost Trend Rates:**

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are “net” and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is applied to that year’s cost to yield the next year’s projected cost.

Year Ending June 30,	Rate (%)				
	Non- Medicare Medical	Medicare Medical	Prescription Drug	Dental	Administrative Expenses
2017	6.5*	5.5*	9.5*	4.0*	3.0*
2018	6.0	5.0	9.0	4.0	3.0
2019	5.5	5.0	8.5	4.0	3.0
2020	5.0	5.0	8.0	4.0	3.0
2021	5.0	5.0	7.5	4.0	3.0
2022	5.0	5.0	7.0	4.0	3.0
2023	5.0	5.0	6.5	4.0	3.0
2024	5.0	5.0	6.0	4.0	3.0
2025	5.0	5.0	5.5	4.0	3.0
2026 & later	5.0	5.0	5.0	4.0	3.0

*\* Trend rates used to roll backward for purposes of the Entry Age Normal Actuarial Cost Method*

The trend rate assumptions were developed using Segal’s internal guidelines, which are established each year using data sources such as the 2016 Segal Health Trend Survey, internal client results, trends from other published surveys prepared by the S&P Dow Jones Indices, consulting firms and brokers, and CPI statistics published by the Bureau of Labor Statistics.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Medicare Part D Subsidy**

**Assumption:**

GASB guidelines prohibit the offset of OPEB obligations by the future value of Medicare Part D subsidies. Therefore, these calculations do not include an estimate for retiree prescription drug plan federal subsidies that the Town may be eligible to receive.

**Retiree Contribution Increase Rate:**

Retiree contributions were assumed to increase with the same trend as the costs they are offsetting.

**Administrative Expenses:**

For self-funded plans, an administrative expense load of \$299 per Town participant and \$309 per Board of Education participant was added to projected incurred claim costs in developing the benefit obligations. For insured plans, administrative expenses were built into the health costs.

**Plan Design:**

Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.

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**Assumption Changes since Prior Valuation:**

- Healthy mortality was changed to the RP-2000 Tables projected 24 years with Scale BB for mortality improvement (previously, RP-2000 Tables projected 19 years with Scale BB).
- Disabled mortality was changed to the RP-2000 Disabled Retiree Tables projected 24 years with Scale BB for mortality improvement (previously, RP-2000 Disabled Retiree Tables projected 19 years with Scale BB).
- Certain demographic assumptions for teachers were updated to be based on the most recent experience study of the Connecticut State Teachers Retirement System (experience study for the five-year period ending June 30, 2015).
- Participation assumption for employees who contribute 100% of premium (Security group and Teachers hired after 7/1/1999) was lowered from 90% to 80%.
- Per-capita claims costs and trend rates were revised based on recent experience and future expectations.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**EXHIBIT III**

**Summary of Plan**

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This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

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<b>Benefit Types:</b>	Medical, Prescription Drug, and Life Insurance
<b>Duration of Coverage:</b>	Lifetime
<b>Plan Provisions by Group:</b>	Eligibility, retiree contributions, spouse coverage, life insurance amounts and other benefit offerings as of July 1, 2016 are summarized as follows:

**Hamden Board of Education – Hamden Education Association**

<b>Eligibility:</b>	Age 55 and 20 years of service. The retiree benefit provisions only apply to teachers employed prior to 1998-1999 school year.
<b>Retiree Contribution:</b>	Retirees pay 0% of plan premium if retired before 7/1/1999. Retirees who were hired on or after 7/1/1999 contribute 100% of plan premium. All other retirees contribute the same percentage contributed by active employees at the time of their retirement (16% for the 7/1/2016 plan year).
<b>Medicare Part B Premium is Reimbursed to the Retiree:</b>	\$1,461.60 in 2016.
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life insurance:</b>	Available for grandfathered retirees

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Hamden Board of Education – The Association of Hamden Public School Administrators**

<b>Eligibility:</b>	Age 55 and 20 years of service.  The retiree benefit provisions only apply to teachers employed prior to 1998-1999 school year.
<b>Retiree Contribution:</b>	Retirees pay 0% of plan premium if retired before 7/1/1999. Retirees who retired on or after 7/1/1999 contribute the same percentage contributed by active employees at the time of their retirement (16% for the 7/1/2016 plan year).
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life insurance:</b>	Available for grandfathered retirees

**Hamden Board of Education – Local 818 of CT Council 4 AFSCME, AFL-CIO (Supervisors)**

<b>Eligibility:</b>	Age 55 and 15 years of service.
<b>Retiree Contribution:</b>	Retirees pay 10% of plan premium if hired on or after 7/1/2001 and 0% if hired before 7/1/2001.
<b>Spouse Coverage:</b>	Yes, if date of hire prior to 7/1/2001.
<b>Survivor Coverage:</b>	Yes, if date of hire prior to 7/1/2001.
<b>Life insurance:</b>	Available for grandfathered retirees

**Hamden Board of Education – United Public Service Employees Union Local 424 Unit 3 (Nurses)**

<b>Eligibility:</b>	Age 55 and 15 years of service.
<b>Retiree Contribution:</b>	Retirees pay 10% of plan premium if hired on or after 7/1/2000 and 0% if hired before 7/1/2000.
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life insurance:</b>	Available for grandfathered retirees

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Hamden Board of Education – United Public Service Employees Union Local 424 Unit 2 (Secretarial, Clerical, Paraprofessionals)**

<b>Eligibility:</b>	Age 55 and 15 years of service.
<b>Retiree Contribution:</b>	Retirees pay: 9% of plan premium if hired before 7/1/2010; 0% of plan premium if retired on or after 7/1/2010 and before 7/1/2013; 5% of plan premium if retired and on or after 7/1/2013 and before 7/1/2014; and 13% of plan premium if retired on or after 7/1/2014.
<b>Spouse Coverage:</b>	Yes, if date of hire prior to 7/1/2000.
<b>Survivor Coverage:</b>	Yes, if date of hire prior to 7/1/2000.
<b>Life insurance:</b>	Available for grandfathered retirees

**Hamden Board of Education – United Public Service Employees Union Local 424 Unit 24 (Security)**

<b>Eligibility:</b>	Age 55 and 15 years of service.
<b>Retiree Contribution:</b>	Retirees pay 100% of plan premium.
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life insurance:</b>	Available for grandfathered retirees

**Hamden Board of Education – Local 431 of CT Council 4 AFSCME, AFL-CIO (Custodians & Maintenance Workers)**

<b>Eligibility:</b>	Age 55 and 15 years of service.
<b>Retiree Contribution:</b>	Retirees pay 0% of plan premium.
<b>Spouse Coverage:</b>	Yes, if date of hire prior to 7/1/1995.
<b>Survivor Coverage:</b>	Yes, if date of hire prior to 7/1/1995.
<b>Life insurance:</b>	Available for grandfathered retirees

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Hamden Board of Education – Non-bargaining employees**

<b>Eligibility:</b>	Age 55 and 15 years of service.
<b>Retiree Contribution:</b>	Retirees pay 10% of plan premium if hired on or after 7/1/2000 and 0% if hired before 7/1/2000.
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life insurance:</b>	Available for grandfathered retirees

**Town of Hamden – Hamden Civilian Dispatchers UE Local #222 CILU-/CIPU**

<b>Eligibility:</b>	Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.
<b>Retiree Contribution:</b>	Town pays 100%, if date of retirement is before June 30, 2011. If date of retirement is on or after June 30, 2011, then the retiree pays: 13% of premium if enrolled in the Century Preferred Plan; 11% of premium if enrolled in the Blue Care Point of Service Plan; and 5% of premium if enrolled in the Blue Care Point of Entry Plan.  Retiree’s contribution is capped at \$2,475 and will increase with inflation thereafter. The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life:</b>	\$4,000 of life insurance.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Town of Hamden – Local 1303-52 of Council #4, AFSCME, AFL-CIO (Engineers)**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.

**Retiree Contribution:** Town pays 100%, if date of hire is before July 1, 1999. If date of hire is on or after July 1, 1999, then the retiree will contribute according to the bargaining agreement. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** \$4,000 of life insurance.



**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Town of Hamden – Hamden Professional Firefighters IAFF, Local 2687**

**Eligibility:** Age 48 with 15 years of service.

**Retiree Contribution:** Town pays 100%, if retired prior to July 1, 2010. If retired on or after July 1, 2010, the retiree pays:  
 12% of premium if enrolled in the Century Preferred Plan;  
 10% of premium if enrolled in the Blue Care Point of Service Plan; and  
 4% of premium if enrolled in the Blue Care Point of Entry Plan.

If retired on or after June 30, 2015, the retiree pays:

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2015	11.5%	\$2,800
July 1, 2016	13.0%	\$2,800
July 1, 2017	14.0%	\$3,000
July 1, 2018	15.0%	\$3,200
July 1, 2019	16.0%	\$3,400
July 1, 2020	17.0%	\$3,600

Retiree pays 5% of total cost of Medicare Supplement Plan F and PDP rider (all future pre-65 retirees shall enroll in the HDHP HSA plan).

**Deductible Funding:** The Town will contribute the following towards the deductible:

<u>Date</u>	<u>Contribution Percentage</u>
July 1, 2015	75%
July 1, 2016	65%
July 1, 2017	60%
July 1, 2018	50%

**Medicare Part B Premium is reimbursed to the retiree:** \$1,461.60 in 2016.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** \$5,000 of life insurance.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Town of Hamden – Local 1303-115 of Council #4, AFSCME, AFL-CIO (Library)**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.

**Retiree Contribution:** Town pays 100%, if date of hire is before August 15, 1999. If date of hire is on or after August 15, 1999, then the retiree will contribute according to the bargaining agreement. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** \$2,500 of life insurance.

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**Town of Hamden – Local 3042 of Council #4, AFSCME, AFL-CIO (Parks & Recreation)**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.

**Retiree Contribution:** Town pays 100%, if date of hire is before July 1, 2000. If date of hire is on or after July 1, 2000, then the retiree will contribute according to the bargaining agreement. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** N/A

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Town of Hamden – Local 907, Council #5, AFSCME, AFL-CIO (The Hamden Police Department)**

<b>Eligibility:</b>	Age 48 with 15 years of service.
<b>Retiree Contribution:</b>	Town pays 100%, if date of hire is before July 1, 2000. If date of hire is on or after July 1, 2000, then the retiree pays:  12% of premium if enrolled in the Century Preferred Plan; 10% of premium if enrolled in the Blue Care Point of Service Plan; and 5% of premium if enrolled in the Blue Care Point of Entry Plan.  Retiree's contribution is capped at \$2,250.
<b>Medicare Part B Premium is reimbursed to the retiree:</b>	\$1,461.60 in 2016.
<b>Spouse Coverage:</b>	Yes.
<b>Survivor Coverage:</b>	Yes.
<b>Life:</b>	\$5,000 of life insurance.

**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**Town of Hamden – United Public Service Employees Union Local 424 Unit 1 (Public Works Employees)**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; If hired on or after 1/1/1982, age 55 with 15 years of service, or age 65 with 10 years of service.

**Retiree Contribution:** Town pays 100%, if date of hire is before July 1, 2000. If date of hire is on or after July 1, 2000, then the retiree will contribute according to the bargaining agreement. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** \$5,000 of life insurance.

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**Town of Hamden – United Public Service Employees Union Local 424 Unit 23 (Supervisors)**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.

**Retiree Contribution:** Town pays 100%, if date of retirement is before July 1, 2012. If date of retirement is on or after July 1, 2012, then the retiree will contribute according to the bargaining agreement. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** \$5,000 of life insurance.

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**Town of Hamden – Local 2863, Council #4, AFSCME, AFL-CIO (Town Hall Employees and Crossing Guards)**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.

**Retiree Contribution:** Town pays 100%, if date of retirement is before July 1, 2013. If date of retirement is on or after July 1, 2013, then the retiree will contribute according to the bargaining agreement. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** \$5,000 of life insurance.

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**Town of Hamden – Non-bargaining Employees**

**Eligibility:** Age 55 with 10 years of service, if hired prior to 1/1/1982; Age 55 with 15 years of service, if hired on or after 1/1/1982.

**Retiree Contribution:** Town pays 100%, if date of hire is before July 1, 1999. If date of hire is on or after July 1, 1999, then the retiree will contribute a certain percentage. The current schedule is summarized below:

**A. Century Preferred PPO Plan**

<u>Date</u>	<u>Contribution Percentage</u>	<u>Annual Cap</u>
July 1, 2013	11%	\$3,400
July 1, 2014	12%	\$3,500
July 1, 2015	13%	\$3,600
July 1, 2016 & over	14%	No Cap

**B. Century Preferred Comp Mix PPO Plan**

July 1, 2013	6%	\$2,600
July 1, 2014	8%	\$2,600
July 1, 2015	10%	\$2,600
July 1, 2016 & over	11%	\$2,900

The retiree’s contribution is capped at the amount he or she was paying at the time of retirement.

**Spouse Coverage:** Yes.

**Survivor Coverage:** Yes.

**Life:** None.



**SECTION 4: Supporting Information for the Town and Board of Education of Hamden July 1, 2016 Measurement Under GASB 43 and 45**

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**EXHIBIT IV**

**Definitions of Terms**

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The following list defines certain technical terms for the convenience of the reader:

**Assumptions or Actuarial**

**Assumptions:**

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
- (e) Disability rates — The rate or probability of disability at a given age.

**Actuarial Present Value of Total Projected Benefits (APB):**

Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.

**Normal Cost:**

The amount of contributions required to fund the benefit allocated to the current year of service.

**Actuarial Accrued Liability For Actives:**

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

**Actuarial Accrued Liability For Retirees:**

The single sum value of lifetime benefits to existing retirees. This sum takes account of life expectancies appropriate to the ages of the retirees and of the interest which the sum is expected to earn before it is entirely paid out in benefits.

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<b>Actuarial Value of Assets (AVA):</b>	The value of assets used by the actuary in the valuation. These may be at market value or some other method used to smooth variations in market value from one valuation to the next.
<b>Funded Ratio:</b>	The ratio AVA/AAL.
<b>Unfunded Actuarial Accrued Liability (UAAL):</b>	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
<b>Amortization of the Unfunded Actuarial Accrued Liability:</b>	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
<b>Investment Return (discount rate):</b>	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next. If the plan is funded on a pay-as-you-go basis, the discount rate is tied to the expected rate of return on day-to-day employer funds.
<b>Covered Payroll:</b>	Annual reported salaries for all active participants on the valuation date.
<b>ARC as a Percentage of Covered Payroll:</b>	The ratio of the annual required contribution to covered payroll.
<b>Health Care Cost Trend Rates:</b>	The annual rate of increase in net claims costs per individual benefiting from the Plan.
<b>Annual Required Contribution (ARC):</b>	The ARC is equal to the sum of the normal cost and the amortization of the unfunded actuarial accrued liability.

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**Net OPEB Obligation (NOO):**

The NOO is the cumulative difference between the ARC and actual contributions made. If the plan is not pre-funded, the actual contribution would be equal to the annual benefit payments less retiree contributions. There are additional adjustments in the NOO calculations to adjust for timing differences between cash and accrual accounting, and to prevent double counting of OPEB plan costs.

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**EXHIBIT V**

**Accounting Requirements**

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The Governmental Accounting Standards Board (GASB) issued Statement Number 43 – *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and Statement Number 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Under these statements, all state and local government entities that provide other post employment benefits (OPEB) are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. The benefits valued in this report are limited to those described in Exhibit III of Section 4, which are based on those provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits is not limited by legal or contractual limits on funding the plan unless those limits clearly translate into benefit limits on the substantive plan being valued.

The new standards introduce an accrual-basis accounting requirement, thereby recognizing the employer cost of postemployment benefits over an employee’s career. The standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. These assumptions are summarized in Exhibit II of Section 4. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the Net OPEB Obligation (NOO). In addition, Required Supplementary Information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan. Exhibits IV and VI of Section

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4 contain a definition of terms as well as more information about GASB 43/45 concepts.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short term volatility in accrued liabilities and the actuarial value of assets, if any.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

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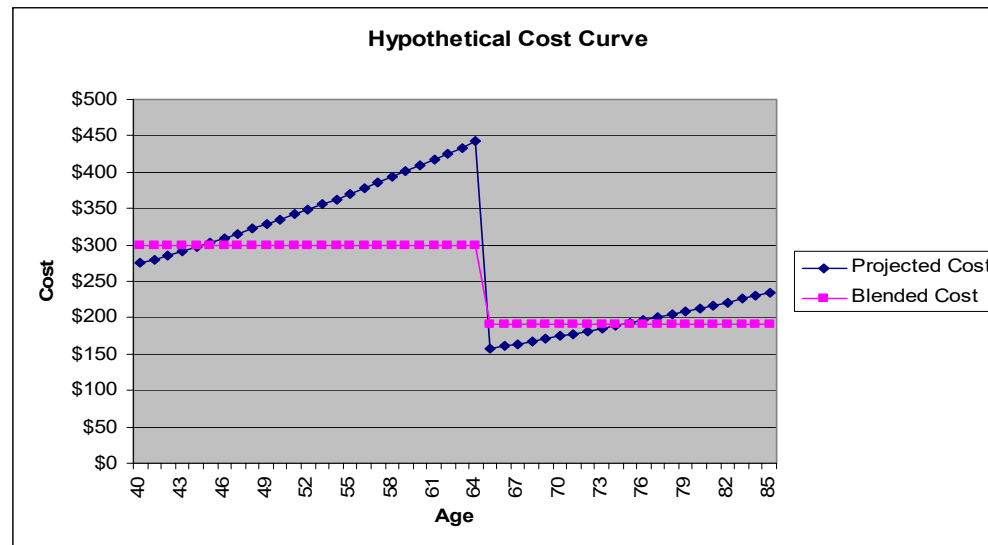
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**EXHIBIT VI**  
**GASB 43/45 Concepts**

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The following graph illustrates why a significant accounting obligation may exist even though the retiree contributes most or all of the blended premium cost of the plan. The average cost for retirees is likely to exceed the average cost for the whole group, leading to an implicit

subsidy for these retirees. The accounting standard requires the employer to identify and account for this implicit subsidy as well as any explicit subsidies the employer may provide.

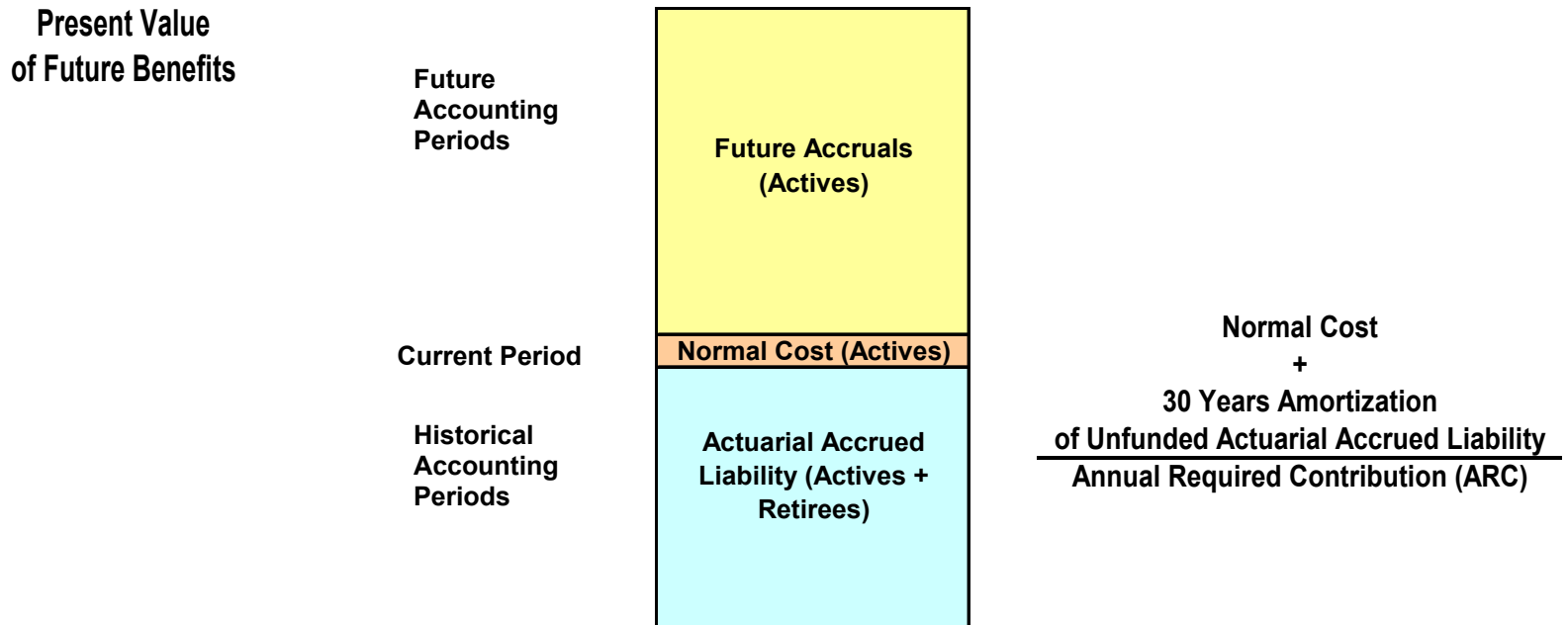


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This graph shows how the actuarial present value of the total projected benefits (APB) is broken down and allocated to various accounting periods. The exact breakdown depends on the actuarial cost method and amortization methods selected by the employer.

**GASB 43/45 Measurement Elements Using Actuarial Cost Methods**



$$\text{Net OPEB Obligation} = \text{ARC}_1 + \text{ARC}_2 + \text{ARC}_3 + \dots - \text{Contribution}_1 - \text{Contribution}_2 - \text{Contribution}_3 - \dots$$