

State of Connecticut Other Post-Employment Benefits Program

Actuarial Valuation and Review of Other
Postemployment Benefits (OPEB) as of
June 30, 2013 In accordance with GASB Statements
No. 43 and No. 45





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February 20, 2014

*Thomas C. Woodruff, Ph.D., Director
Healthcare Policy & Benefit Services Division
55 Elm Street
Hartford, Connecticut 06106-1775*

Dear Dr. Woodruff:

We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2013 under Governmental Accounting Standards Board Statements 43 and 45. The report summarizes the actuarial data used in the valuation, discloses the Net OPEB obligation (NOO) as of June 30, 2013, establishes the Annual Required Contribution (ARC) for the coming year, and analyzes the preceding year's experience. This report was based on the census and financial data provided by the Healthcare Policy & Benefit Services Division of the Office of the State Comptroller and the terms of the Plan. The actuarial calculations were completed under the supervision of K. Eric Fredén, FSA, MAAA, FCA, Enrolled Actuary, Vice President & 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:

*Daniel J. Rhodes, FSA, MAAA, FCA
Consulting Actuary*

*Theresa DeMattie
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SECTION 1: Executive Summary for State of Connecticut Other Post-Employment Benefits Program June 30, 2013 Measurement Under GASB 43 and 45

PURPOSE

This report presents the results of our actuarial valuation of the State of Connecticut (the “State”) OPEB plan as of June 30, 2013. 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 June 30, 2013 is \$19,532,514,019, an increase of \$1,627,887,479, from the prior valuation UAAL of \$17,904,626,540. An update to the prior valuation for new retiree claims experience dated April 12, 2013 lowered the UAAL as of June 30, 2011 by \$1,678,939,103 to \$16,225,687,437. Net unfunded plan obligations had been expected to increase from the updated UAAL to \$17,926,124,122 as of June 30, 2013, due to normal plan operations. The difference between actual and expected unfunded actuarial accrued liabilities was the net effect of several factors:
 - An **actuarial experience gain** decreased the UAAL by \$23,911,798. This was the net result of gains and losses due to fund investment performance, demographic changes and actual 2013 contributions and benefit payments that were different from expected. We have taken these actuarial gains and losses into account in reviewing our assumptions for the current valuation.
 - **Valuation assumption changes** increased the AAL by \$1,792,923,240. This was a result of (1) an increase in obligations due to changing the valuation-year per capita health costs and raising the future trend on such costs, and (2) an increase due to updating the demographic assumptions based on the experience reviews completed by the pension actuary.
 - **Plan changes** decreased the AAL by \$162,621,545. These changes were included in the SEBAC 2009 and the Revised SEBAC 2011 agreement between the State of Connecticut and the State Employees Bargaining Agent Coalition. The current plan of benefits is summarized in Exhibit III of Section 4.
- As of June 30, 2013, the ratio of assets to the AAL (the funded ratio) is 0.73%.
- The **Net OPEB Obligation (NOO)** increased to \$5,961,366,000 for the year ending June 30, 2013. The NOO generally increases if the contributions in relation to the ARC are less than the ARC. The contributions in relation to the ARC during the year ending June 30, 2013 were \$542,615,000 compared to the ARC of \$1,271,279,000. Contributions in relation to the ARC totaled 42.68% of the ARC in the year ending June 30, 2013. Chart 6 shows the detailed derivation of the NOO as of June 30, 2013.
- The **Annual Required Contribution (ARC)** increased to \$1,525,371,000 for the year ending June 30, 2014. The ARC was \$1,354,738,000 for the last valuation. As a percentage of payroll, the ARC increased from 34.72% in the last valuation to 43.09% this year.
- The **Annual OPEB Cost (AOC)** increased to \$1,560,006,000 for the year ending June 30, 2014. The AOC was \$1,220,577,000 in the prior valuation.

**SECTION 1: Executive Summary for State of Connecticut Other Post-Employment Benefits Program June 30, 2013
Measurement Under GASB 43 and 45**

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

SUMMARY OF VALUATION RESULTS

	June 30, 2013	June 30, 2011
Actuarial Accrued Liability (AAL)	\$19,676,322,019	\$17,954,273,540
Actuarial Value of Assets	143,808,000	49,647,000
Unfunded Actuarial Accrued Liability	19,532,514,019	17,904,626,540
Funded Ratio	0.73%	0.28%
Market Value of Assets	\$143,808,000	\$49,647,000
Annual Required Contribution (ARC) for Fiscal Year Ending:	June 30, 2014	June 30, 2012
Normal cost (beginning of year)	\$480,565,944	\$477,675,100
Amortization of the unfunded actuarial accrued liability	999,871,770	837,155,521
Adjustment for timing	<u>44,933,471</u>	<u>39,907,051</u>
Total Annual Required Contribution, including adjustment for timing	\$1,525,371,185	\$1,354,737,672
Covered payroll	\$3,539,727,598	\$3,902,248,185
ARC as a percentage of pay	43.09%	34.72%
Total Participants	98,460	101,438
Annual OPEB Cost (AOC) for Fiscal Year Ending:	June 30, 2014	June 30, 2012*
Annual Required Contributions	\$1,525,371,000	\$1,354,738,000
Interest on Net OPEB Obligations	339,798,000	73,689,000
ARC Adjustments	<u>-305,163,000</u>	<u>-207,850,000</u>
Total Annual OPEB Cost	\$1,560,006,000	\$1,220,577,000
AOC as a percent of pay	44.07%	31.28%

** From the Comprehensive Annual Report for the State of Connecticut for the Fiscal Year Ended June 30, 2012.*

**SECTION 1: Executive Summary for State of Connecticut Other Post-Employment Benefits Program June 30, 2013
Measurement Under GASB 43 and 45**

February 20, 2014

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 the State of Connecticut's other post-employment benefits programs as of June 30, 2013, 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 Employer and reliance on participant, premium, claims and expense data provided by the Employer or from vendors employed by the Employer. 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. The signing actuary is a member of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and meets their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein. Further, in my opinion, the assumptions as approved by the State are reasonably related to the experience and expectations of the post-employment benefit programs.



K. Eric Fredén, FSA, MAAA, FCA, EA
Vice President & Actuary

**SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013
Measurement Under GASB 43 and 45**

The actuarial present value of total projected benefits uses the actuarial assumptions disclosed in Section 4 to calculate the value today of all benefits expected to be paid to current actives and retired plan members. The actuarial balance sheet shows the expected breakdown of how these benefits will be financed.

CHART 1

Actuarial Present Value of Total Projected Benefits (APB) and Actuarial Balance Sheet

	Actuarial Present Value of Total Projected Benefits (APB)	
	June 30, 2013	June 30, 2011
Participant Category		
Current retirees, beneficiaries, and dependents	\$9,356,955,529	\$8,265,852,130
Current active members	14,564,245,680	14,057,310,049
Terminated members entitled but not yet eligible	<u>138,781,373</u>	<u>282,961,719</u>
Total as of June 30	\$24,059,982,582	\$22,606,123,898
	June 30, 2013	June 30, 2011

Actuarial Balance Sheet

The actuarial balance sheet as of the valuation date is as follows:

Assets		
1. Actuarial value of assets	\$143,808,000	\$49,647,000
2. Present value of future normal costs	4,383,660,563	4,651,850,358
3. Unfunded actuarial accrued liability	<u>19,532,514,019</u>	<u>17,904,626,540</u>
4. Present value of current and future assets	\$24,059,982,582	\$22,606,123,898
Liabilities		
5. Actuarial Present Value of total Projected Benefits	\$24,059,982,582	\$22,606,123,898

**SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013
Measurement Under GASB 43 and 45**

The actuarial accrued liability shows that portion of the APB (Chart 1) 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 portion covered by accumulated plan assets.

The unfunded actuarial accrued liability may be amortized over periods of up to 30 years. Amortization payments may be calculated as level dollar amounts or as amounts designed to remain level as a percent of a growing payroll base. The State of Connecticut Other Post-Employment Benefits Program has elected to amortize unfunded actuarial accrued liability using the following rules: 30-year level percent of a growing payroll as of June 30, 2007.

CHART 2

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

	June 30, 2013	June 30, 2011
Participant Category		
Current retirees, beneficiaries, and dependents	\$9,356,955,529	\$8,265,852,130
Current active members	10,180,585,117	9,405,459,691
Terminated members entitled but not yet eligible	<u>138,781,373</u>	<u>282,961,719</u>
Total	\$19,676,322,019	\$17,954,273,540
Effect of Retiree Contributions		
Actuarial accrued liability before reduction for retiree contributions	\$20,772,630,435	\$18,683,105,760
Less projected retiree contributions	<u>1,096,308,416</u>	<u>728,832,220</u>
Net employer actuarial accrued liability	19,676,322,019	17,954,273,540
Actuarial value of assets	<u>143,808,000</u>	<u>49,647,000</u>
Unfunded actuarial accrued liability	\$19,532,514,019	\$17,904,626,540

SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013 Measurement Under GASB 43 and 45

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 adjusted as if the annual cost were to be contributed in twelve equal monthly installments.

The amortization payment is based on a 30-year amortization (24 years remaining as of June 30, 2013) of the Unfunded Actuarial Accrued Liability on a level percentage of growing payroll basis.

CHART 3

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

Cost Element	Fiscal Year Beginning July 1, 2013 and Ending June 30, 2014		Fiscal Year Beginning July 1, 2011 and Ending June 30, 2012	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	\$480,565,944	13.58%	\$477,675,100	12.24%
2. Amortization of the unfunded actuarial accrued liability (24 years)	999,871,770	28.25%	837,155,521	21.45%
3. Adjustment for timing	<u>44,933,471</u>	<u>1.26%</u>	<u>39,907,051</u>	<u>1.03%</u>
4. Total Annual Required Contribution (ARC)	<u>\$1,525,371,185</u>	<u>43.09%</u>	<u>\$1,354,737,672</u>	<u>34.72%</u>
5. Total Compensation	\$3,539,727,598		\$3,902,248,185	

**SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013
Measurement Under GASB 43 and 45**

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.

CHART 3 (continued)
Determination of Annual OPEB Cost (AOC) – Payable Throughout Fiscal Year

Cost Element	Fiscal Year Beginning July 1, 2013 and Ending June 30, 2014		Fiscal Year Beginning July 1, 2011 and Ending June 30, 2012	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Annual Required Contribution	\$1,525,371,000	43.09%	\$1,354,738,000	34.72%
2. Interest on Beginning of Year Net OPEB Obligation (NOO)	339,798,000	9.60%	73,689,000	1.89%
3. ARC adjustment	<u>-305,163,000</u>	<u>-8.62%</u>	<u>-207,850,000</u>	<u>-5.33%</u>
4. Annual OPEB Cost	<u>\$1,560,006,000</u>	<u>44.07%</u>	<u>\$1,220,577,000</u>	<u>31.28%</u>

**SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013
Measurement Under GASB 43 and 45**

For GASB 43 (plan reporting) purposes, the schedule of employer contributions compares actual contributions to the ARC. For GASB 45 (employer reporting) purposes, the

schedule of employer contributions compares actual contributions to the AOC.

CHART 4

**Required Supplementary Information – Schedule of Employer Contributions
GASB 43**

Fiscal Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
2012	\$1,354,738,000	\$541,262,000	39.95%
2013	1,271,279,000	542,615,000	42.68%
2014	1,525,371,000	Not made yet	N/A

**Required Supplementary Information – Schedule of Employer Contributions
GASB 45**

Fiscal Year Ended June 30	Annual OPEB Cost	Actual Contributions	Percentage Contributed
2012	\$1,220,577,000	\$541,262,000	44.34%
2013	1,316,612,000	542,615,000	41.21%
2014	1,560,006,000	Not made yet	N/A

**SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013
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.

CHART 5

Required Supplementary Information – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) – (a) / (c)]
04/01/2006*	\$0	\$21,681,444,000	\$21,681,444,000	0.00%	N/A	N/A
04/01/2008*	0	26,566,940,000	26,566,940,000	0.00%	N/A	N/A
06/30/2011	49,647,000	17,954,274,000	17,904,627,000	0.28%	\$3,902,248,000	458.83%
06/30/2013	143,808,000	19,676,322,000	19,532,514,000	0.73%	3,539,728,000	551.81%

* The April 1, 2006 and April 1, 2008 numbers were taken from the April 1, 2008 valuation report issued by the prior actuary.

**SECTION 2: Valuation Results for the State of Connecticut Other Post-Employment Benefits Program June 30, 2013
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.

CHART 6

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)
--	06/30/2011	--	--	--	--	--	--	\$4,508,054,000*
06/30/2011	06/30/2012	\$1,354,738,000	\$73,689,000	-\$207,850,000	\$1,220,577,000	\$541,262,000	\$679,315,000	5,187,369,000
06/30/2011	06/30/2013	1,271,279,000	295,680,000	-250,347,000	1,316,612,000	542,615,000	773,997,000	5,961,366,000
06/30/2013	06/30/2014	1,525,371,000	339,798,000	-305,163,000	1,560,006,000	Not made yet	N/A	N/A

* As restated in the June 30, 2012 Comprehensive Annual Financial Report for the State of Connecticut.

**SECTION 3: Supplemental Valuation Details for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 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**

	June 30, 2013	June 30, 2011
Retirees		
Number of retirees	41,313	39,785
Average age of retirees	69.6	69.3
Number of spouses	22,442	21,458
Average age of spouses	66.0	65.9
Surviving Spouses		
Number	3,838	3,617
Average age	76.5	76.1
Active Participants		
Number	52,720	56,968
Average age	47.7	46.7
Average years of service	15.2	15.1
Average expected retirement age	61.3	61.4
Inactive Vesteds		
Number of inactive vested	589	1,068
Average age of inactive vested	50.1	50.1

**SECTION 3: Supplemental Valuation Details for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 Measurement Under GASB 43 and 45**

EXHIBIT B

Financial Information

Employers may accumulate assets to pay for future OPEB. In order to be treated as plan assets, the funds must be set aside in a trust fund or equivalent arrangement that has the following characteristics:

a. Employer contributions are irrevocable

b. Plan assets are dedicated to OPEB only

c. Plan assets are legally protected from the creditors of the employer and the plan administrator.

The State of Connecticut Other Post-Employment Benefits Program has an arrangement that meets those requirements.

Statement of Plan Net Assets

	Year Ended June 30, 2013	Year Ended June 30, 2012	Year Ended June 30, 2011
Assets			
Cash equivalents	\$43,756,000	\$83,298,000	\$74,975,000
Accounts receivable from other funds	6,658,000	3,000	-1,000
Investments and securities lending collateral	<u>107,006,000</u>	<u>0</u>	<u>0</u>
Total assets	\$157,420,000	\$83,301,000	\$74,974,000
Liabilities			
Less accounts payable:	<u>-13,612,000</u>	<u>-23,584,000</u>	<u>-25,327,000</u>
Net assets held in trust for other postemployment benefits	\$143,808,000	\$59,717,000	\$49,647,000

**SECTION 3: Supplemental Valuation Details for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 Measurement Under GASB 43 and 45**

EXHIBIT C

Statement of Changes in Plan Net Assets

	Year Ended June 30, 2013	Year Ended June 30, 2012	Year Ended June 30, 2011
Additions			
Total contributions	\$570,119,000	\$541,262,000	\$544,767,000
Transfers in	0	14,500,000	0
Net investment income	<u>-54,000</u>	<u>8,000</u>	<u>3,000</u>
Total additions:	\$570,065,000	\$555,770,000	\$544,770,000
Deductions			
Benefit payments	-\$485,969,000	-\$545,700,000	-\$530,779,000
Expenses and Other	<u>-5,000</u>	<u>0</u>	<u>0</u>
Total deductions	-\$485,974,000	-\$545,700,000	-\$530,779,000
Net increase	\$84,091,000	\$10,070,000	\$13,991,000
Net assets held in trust for other postemployment benefits			
Beginning of year	\$59,717,000	\$49,647,000	\$35,656,000
End of year	\$143,808,000	\$59,717,000	\$49,647,000

* Employer contributions include both implicit and explicit subsidies for the retirees' cost of OPEB. These are the contributions in relation to the ARC.

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 Measurement Under GASB 43 and 45**

EXHIBIT I

Summary of Required Supplementary Information

Valuation date	June 30, 2013
Actuarial cost method	Projected Unit Credit
Amortization method	Level percent of growing payroll, closed, 30 years
Remaining amortization period	24 years as of June 30, 2013
Asset valuation method	Market Value
Actuarial assumptions:	
Investment rate of return	5.70%
Payroll growth rate	3.75%
Medical cost trend rate	7.00% graded to 5.0% over 5 years
Drug cost trend rate	6.00% graded to 5.0% over 5 years
Dental and Part B trend rates	5.00%
Plan membership:	
Current retirees, beneficiaries, and dependents	67,593
Current active participants	52,720
Terminated participants entitled but not yet eligible	<u>589</u>
Total	120,902

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 Measurement Under GASB 43 and 45**

EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method

Data:	Detailed census data, premium data and/or claim experience, and summary plan descriptions for OPEB were provided by the Healthcare Policy & Benefit Services Division of the Office of the State Comptroller. Eligible groups for the Program include State employees covered under the State Employees Retirement System (SERS), State Teachers' Retirement System (STRS), Probate Judges and Employees Retirement System (PJERS), Judges, Family Support Magistrates and Compensation Commissioners Retirement System (JFSMCCRS), Alternative Retirement Program (ARP), and the Hybrid Defined Benefit/Defined Contribution Plan (HYBRID). In addition, there are other State employees not covered under the retirement systems who are eligible for this program (OTHER). Actuarial assumptions that differ by group are noted.
Actuarial Cost Method:	Projected Unit Credit. The accrued benefit for actives is the pro-rata portion (based on service to date divided by service at first eligibility for early retirement) of the projected benefit payable upon retirement, disability, termination or death.
Asset Valuation Method:	Market Value
Measurement Date:	June 30, 2013
Discount Rate:	5.70% determined for the June 30, 2011 valuation using the following methodology to blend discount rates: <ol style="list-style-type: none">1. The expected return on trust assets for each of the next ten years was calculated assuming that trust assets earn 8.25%, except that pay-as-you-go amounts were assumed to reside in the trust for an average of 3 months and be invested in funds similar to the State's general assets (i.e., earn 4.50% annually).2. The expected asset level in the trust was then determined for each of the next ten years, based on any initial deposits plus any ongoing contributions.3. A weighted average blended rate was determined for each of the next ten years based on 8.25% weighted by the expected asset level in the trust and 4.50% weighted by the annual pay-as-you-go level.

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 Measurement Under GASB 43 and 45**

4. The weighted average blended rates for the ten-year period were then averaged to arrive at the final blended discount rates.

Salary Increases:

SERS, ARP, HYBRID, OTHER: Rates are zero for 2013 and are 1% less than table for 2014-2016.

Rates vary by years of service as follows:

<u>Years of Service</u>	<u>Rate</u>	<u>Years of Service</u>	<u>Rate</u>
0	10.00%	5	5.75%
1	20.00	6-9	5.50
2	10.00	10-14	5.00
3	6.25	15+	4.00
4	6.00		

STRS: Rates vary by years of service as follows:

<u>Years of Service</u>	<u>Rate</u>	<u>Years of Service</u>	<u>Rate</u>
0-9	7.00%	15-19	4.00%
10-14	5.50	20+	3.75

PJERS: 4.75%

JFSMCCRS: 4.75%

Payroll Growth Rate: 3.75%

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
June 30, 2013 Measurement Under GASB 43 and 45**

Mortality Rates:

Healthy:

SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER:

RP-2000 Combined Healthy Mortality Table with sex-distinct rates with male rates projected 15 years (set back 2 years) and female rates projected 25 years (set back one year) under Scale AA

STRS - post-retirement:

RP-2000 Combined Healthy Mortality Table with sex-distinct rates projected forward 19 years under Scale AA with a 2-year age setback for male and female rates

STRS – pre-retirement:

Pre-retirement mortality rates equal to 75% of post-retirement healthy mortality rates

Disabled:

SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER:

RP-2000 Disabled Retiree Mortality Table with sex-distinct rates using 55% of the male rates for male participants and 80% of the female rates for female participants

STRS:

Disability mortality rates equal to post-retirement healthy mortality rates set forward 10 years in age

The RP-2000 Combined Healthy Mortality Table with a 15-year projection and 2 year setback for males and a 25-year projection and one year setback for females for participants in the SERS, PJERS, JFSMCCRS, ARP, HYBRID, and OTHER groups and with a 19-year projection and a two-year setback for participants in the STRS group was selected based on the most recent pension valuations available for each group and was assumed to contain provision appropriate to reasonably reflect future mortality improvement based on a review by the pension actuary of the mortality experience.

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
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Termination Rates before Retirement:

SERS

Age	Rate (%)					
	Mortality		Disability*		Turnover**	
	Male	Female	Hazardous	Non-Hazardous	Male	Female
25	0.0297	0.0138	0.0000	0.0100	5.0000	5.0000
35	0.0585	0.0338	0.1500	0.0500	3.0000	3.0000
45	0.1100	0.0705	0.3000	0.1600	2.2000	2.0000
55	0.2154	0.1885	0.6000	0.4000	0.0000	0.0000
65	0.8104	0.7604	1.1000	0.8000	0.0000	0.0000

* 20% of disabilities are assumed to be in-service. Rates cut off at early retirement eligibility.

** Represents rates for non-Hazardous participants. Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service. For Hazardous participants, the male rates are multiplied by 35% and the female rates by 55%.

STRS

Age	Rate (%)					
	Mortality		Disability*		Turnover**	
	Male	Female	Male	Female	Male	Female
25	0.0210	0.0109	0.0455	0.0500	1.2000	3.5000
35	0.0430	0.0249	0.0455	0.0410	1.2000	3.5000
45	0.0789	0.0528	0.1625	0.1200	1.2600	1.3000
55	0.1490	0.1316	0.7150	0.4380	2.7600	1.6000
65	0.5744	0.5215	1.2805	0.5000	0.0000	0.0000

* Rates cut off at early retirement eligibility.

** Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service.

PJERS

Age	Rate (%)					
	Mortality		Disability*		Turnover	
	Male	Female	Male	Female	Male	Female
25	0.0297	0.0138	0.0400	0.0400	5.0000	7.5000
35	0.0585	0.0338	0.0800	0.0800	5.0000	5.0000
45	0.1100	0.0705	0.1900	0.1900	5.0000	5.0000
55	0.2154	0.1885	0.5200	0.5200	5.0000	5.0000
65	0.8104	0.7604	0.0000	0.0000	5.0000	5.0000

* Rates cut off at early retirement eligibility.

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
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Termination Rates before Retirement (continued):

JFSMCCRS

Age	Rate (%)					
	Mortality		Disability*		Turnover**	
	Male	Female	Male	Female	Male	Female
25	0.0297	0.0138	0.0854	0.0854	0.0000	0.0000
35	0.0585	0.0338	0.1474	0.1474	0.0000	0.0000
45	0.1100	0.0705	0.3595	0.3595	0.0000	0.0000
55	0.2154	0.1885	1.0089	1.0089	0.0000	0.0000
65	0.8104	0.7604	0.0000	0.0000	0.0000	0.0000

* Rates equal to 30% of the 1975 Social Security Table and cut off at normal retirement eligibility.

** No pre-retirement turnover is assumed.

ARP

Age	Rate (%)					
	Mortality		Disability*		Turnover**	
	Male	Female	Male	Female	Male	Female
25	0.0297	0.0138	0.0100	0.0100	5.0000	5.0000
35	0.0585	0.0338	0.0500	0.0500	3.0000	3.0000
45	0.1100	0.0705	0.1600	0.1600	2.2000	2.0000
55	0.2154	0.1885	0.4000	0.4000	0.0000	0.0000
65	0.8104	0.7604	0.8000	0.8000	0.0000	0.0000

* Rates cut off at early retirement eligibility.

** Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service.

OTHER

Age	Rate (%)					
	Mortality		Disability*		Turnover**	
	Male	Female	Male	Female	Male	Female
25	0.0297	0.0138	0.0100	0.0100	5.0000	5.0000
35	0.0585	0.0338	0.0500	0.0500	3.0000	3.0000
45	0.1100	0.0705	0.1600	0.1600	2.2000	2.0000
55	0.2154	0.1885	0.4000	0.4000	0.0000	0.0000
65	0.8104	0.7604	0.8000	0.8000	0.0000	0.0000

* Rates cut off at early retirement eligibility.

** Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service.

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HYBRID

Age	Rate (%)					
	Mortality		Disability*		Turnover**	
	Male	Female	Male	Female	Male	Female
25	0.0297	0.0138	0.0100	0.0100	5.0000	5.0000
35	0.0585	0.0338	0.0500	0.0500	3.0000	3.0000
45	0.1100	0.0705	0.1600	0.1600	2.2000	2.0000
55	0.2154	0.1885	0.4000	0.4000	0.0000	0.0000
65	0.8104	0.7604	0.8000	0.8000	0.0000	0.0000

* Rates cut off at early retirement eligibility.

** Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service.

Actives' Retirement Rates:

SERS (Tier I, II, IIA), HYBRID

Hazardous			Non-Hazardous			
Age	First Year Eligible	Subsequent Years	Age	First Year Eligible for Reduced	First Year Eligible for Unreduced	Subsequent Years
<45	18.0%	10.0%	55	7.5%	15.0%	12.5%
45-48	25.0	10.0	56-59	5.0	15.0	12.5
49-59	10.0	10.0	60	5.0	25.0	12.5
60-69	25.0	15.0	61	15.0	25.0	15.0
70-79	100.0	20.0	62	10.0	10.0	30.0
80+	100.0	100.0	63	35.0	35.0	25.0
			64	45.0	45.0	25.0
			65-69	65.0	65.0	25.0
			70-79	100.0	100.0	20.0
			80+	100.0	100.0	100.0

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Actives' Retirement Rates (continued):

SERS (Tier III), HYBRID

Hazardous			Non-Hazardous			
Age	First Year Eligible	Subsequent Years	Age	First Year Eligible for Reduced	First Year Eligible for Unreduced	Subsequent Years
<50	18.0%	10.0%	58-59	5.0%	7.5%	5.0%
50-59	25.0	10.0	60	5.0	12.5	12.5
60-69	10.0	10.0	61	10.0	15.0	15.0
70-79	100.0	20.0	62	10.0	10.0	30.0
80+	100.0	100.0	63	10.0	35.0	25.0
			64	10.0	45.0	25.0
			65-69	25.0	65.0	25.0
			70-79	25.0	100.0	20.0
			80+	100.0	100.0	100.0

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Actives' Retirement Rates (continued):

<i>STRS</i> Age	Unreduced		Portable		Reduced	
	Male	Female	Male	Female	Male	Female
50-51	27.5%	15.0%	--	--	2.0%	2.0%
52	27.5	15.0	--	--	2.5	3.0
53	27.5	15.0	--	--	3.0	3.5
54	27.5	15.0	--	--	4.0	4.0
55	38.5	30.0	--	--	4.5	6.0
56	38.5	30.0	--	--	6.0	7.0
57	38.5	30.0	--	--	9.0	7.5
58	38.5	30.0	--	--	10.0	8.0
59	38.5	30.0	--	--	11.0	8.5
60	22.0	20.0	6.0%	5.4%	--	--
61	25.3	22.5	6.0	7.2	--	--
62	25.3	22.5	15.0	9.9	--	--
63-64	27.5	22.5	10.0	7.2	--	--
65	36.3	30.0	20.0	13.5	--	--
66	27.5	30.0	20.0	10.8	--	--
67	27.5	30.0	20.0	13.5	--	--
68	27.5	30.0	20.0	10.8	--	--
69	27.5	30.0	35.0	10.8	--	--
70-73	100.0	40.0	35.0	10.8	--	--
74	100.0	40.0	35.0	18.0	--	--
75-79	100.0	40.0	40.0	18.0	--	--
80+	100.0	100.0	100.0	100.0	--	--

**SECTION 4: Supporting Information for the State of Connecticut Other Post-Employment Benefits Program
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Actives' Retirement Rates (continued):

PJERS

Age	Rate
50-61	5.0%
62-64	10.0
65-69	20.0
70+	100.0

JFSMCCRS:

50% are assumed to retire at the later of age 65 and 10 years of service with 100% at age 70

ARP

Age	First Year Eligible	Subsequent Years
55-59	15.0%	12.5%
60	25.0	12.5
61	25.0	15.0
62	10.0	30.0
63	35.0	25.0
64	45.0	25.0
65-69	65.0	25.0
70-79	100.0	20.0
80+	100.0	100.0

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Actives' Retirement Rates (continued):

<i>OTHER</i>	Age	First Year Eligible for Reduced	First Year Eligible for Unreduced	Subsequent Years
	55	7.5%	15.0%	12.5%
	56-59	5.0	15.0	12.5
	60	5.0	25.0	12.5
	61	15.0	25.0	15.0
	62	10.0	10.0	30.0
	63	35.0	35.0	25.0
	64	45.0	45.0	25.0
	65-69	65.0	65.0	25.0
	70-79	100.0	100.0	20.0
	80+	100.0	100.0	100.0

Inactive Vesteds' Retirement Rates: 100% are assumed to retire at first eligibility for normal retirement

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Missing Participant Data:

A missing census item for a given participant was assumed to equal the average value of that item over all other participants of the same status for whom the item is known.

For this valuation, 1,752 active members were reported with missing compensation.

Spousal coverage was set for current retirees based on their medical tier.

For retirees with spousal coverage who did not have demographic data available, the assumption for the respective active group was used.

Current retirees missing date of retirement were assumed to retire before June 1, 2009 and therefore receive the prescription drug benefit for retirements prior to June 1, 2009. New retirees missing date of retirement were assumed to retire after June 1, 2009.

HYBRID members were assumed to elect the SERS tier available at their original date of hire.

Current employee Trust Fund balances for employees with less than 5 years of service at July 1, 2010 and employees hired after July 1, 2010 were estimated to be equal to three years of contributions of 3% of current salary (discounted by the payroll growth assumption to the year of contribution) per year.

Medicare eligible retirees under age 65 were assumed to be disabled.

Inactive vested participants missing service were assumed to terminate as of January 1, 2013 and for those missing service we calculated employment service between their date of hire and their termination date. Inactive Vested missing gender were assumed to be female.

75% of actives missing medical plan or dental plan information were assumed to be in a plan that paid contributions.

We assumed TEACHERS retirees paying a percentage of the Early Retirement Premium would reach Normal Retirement Age at age 60. Similarly, we assumed SERS retirees paying a percentage of the Early Retirement Premium would reach Normal Retirement Age at age 62.

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**Continuation of Medical and
Dental Benefits after Retiree's
Death:**

For retiree medical and dental benefits, we assumed that 64% of current and future retired members have medical and dental benefits that continue after the retiree's death, and 36% have medical and dental benefits that stop upon the retiree's death.

Participation and Coverage Election: 100% of current active and inactive vested participants are assumed to elect coverage.

**Health Enhancement Program
Election:**

100% of future retirees were assumed to elect to participate in the Health Enhancement Program.

Dependents:

Demographic data was available for spouses of current retirees. The percentage of future retirees electing coverage and assumed age differences between husbands and wives are shown below:

	Percentage Electing Spousal Coverage	Age of Spouse
<i>SERS</i>	80%	Females same age as males
<i>STRS</i>	85% of males; 75% of females	Females 3 years younger than males
<i>PJERS</i>	100%	Females 3 years younger than males
<i>JFSMCCRS</i>	80%	Females 3 years younger than males
<i>ARP</i>	100%	Females same age as males
<i>HYBRID</i>	80%	Females same age as males
<i>OTHER</i>	80%	Females same age as males

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Per Capita Cost Development:

*Self-Funded (Medical and
Drug Plan)*

Per capita claims costs were based on actual paid retiree claim experience furnished by the State for the period April 1, 2011 through March 31, 2013. Claims were separated by plan and 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,
- the per capita claim was trended to the midpoint of the valuation year at assumed trend rates, and
- the per capita claim was adjusted for the effect of any plan changes.

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.

*Fully Insured Dental Plan
Administrative Expenses*

Per capita costs were based on actual premium rates effective July 1, 2013.

Administrative expenses were based on UHC and Anthem's access fees furnished by the State

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Per Capita Health Costs:

Dental claims costs for the valuation year are \$490. The annual per capita cost for Medicare Part B reimbursement for the plan year beginning July 1, 2013 is assumed to be \$1,259. Medical and prescription drug claims costs for the valuation year, excluding assumed expenses, are shown in the table below for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions. Medical claims costs for retirees not eligible for Medicare are approximately six times higher than the costs listed at ages 65 and above. Prescription drug costs for retirees who retired before June 1, 2009 are approximately 7% higher than the cost shown below for ages under age 65.

Age	Medical				Prescription Drug			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
50	\$7,889	\$8,986	\$5,511	\$7,215	\$2,448	\$2,789	\$1,710	\$2,239
55	9,369	9,673	7,374	8,352	2,908	3,002	2,288	2,592
60	11,127	10,427	9,872	9,687	3,453	3,236	3,063	3,006
64	12,766	11,061	12,462	10,902	3,962	3,433	3,867	3,383
65	2,071	1,760	2,071	1,760	2,624	2,230	2,624	2,230
70	2,400	1,897	2,400	1,897	3,041	2,404	3,041	2,404
75	2,587	2,042	2,587	2,042	3,277	2,587	3,277	2,587

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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 (%)			
	Medical	Prescription Drug	Dental	Part B
2014	7.00	6.00	5.00	5.00
2015	6.60	5.80	5.00	5.00
2016	6.20	5.60	5.00	5.00
2017	5.80	5.40	5.00	5.00
2018	5.40	5.20	5.00	5.00
2019 & later	5.00	5.00	5.00	5.00

Medicare Part D Subsidy Assumption:

The State no longer participants in the Retiree Drug Subsidy (RDS) program. The prior valuation did not reflect Part D subsidies, as GASB guidelines prohibit the offset of OPEB obligations by the future value of RDS payments. As of January 1, 2012, the State provides prescription drug benefits to Medicare-eligible retirees through an Employer Group Waiver Plan (EGWP). Subsidies implicit in lower costs for the EGWP program are recognized in this valuation.

Retiree Contributions:

An average contribution of \$159 was used for plans requiring contributions in the valuation year. An average contribution of \$392 was used in the valuation year for dental benefits. Early Retiree Premiums were based on an average premium of \$10,797 in the valuation year.

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Retiree Contribution Increase Rate: Contributions for dental benefits are assumed to increase at 5.00% per year. An annual increase in required retiree contributions for medical and prescription drugs was assumed, as shown below.

Year Ending June 30,	Rate (%)
2014	6.75
2015	6.40
2016	6.05
2017	5.70
2018	5.35
2019 & later	5.00

Administrative Expenses: An administrative expense load of \$263 per participant increasing at 3.00% per year was added to projected incurred medical claim costs in developing the benefit obligations.

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

Annual Maximum Benefits: No increase in the annual maximum benefit levels was assumed.

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**Assumption Changes
since Prior Valuation:**

Medical, Prescription drug and dental claims costs were updated for recent experience. Trend rates on medical and prescription drug were adjusted.

The explicit administrative expense assumption per participant was decreased to \$263.

The assumption for Medicare Part B was adjusted.

The average premium used to calculate Early Retirement Premiums was updated to \$10,797.

The retiree contribution increase rate was adjusted.

The payroll growth assumption was lowered from 4.00% to 3.75%.

The salary scale, retirement rates, mortality rates, turnover rates and disability rates for SERS were updated based on the September 12, 2012 Experience Investigation completed by Cavanaugh Macdonald for the Retirement System and confirmed in the June 30, 2012 valuation report.

The salary scale, retirement rates, and turnover rates for STRS were updated based on the April 7, 2011 Experience Investigation completed by Cavanaugh Macdonald for the Retirement System and confirmed in the June 30, 2012 valuation report.

The salary scale and mortality rates for JFSMCCRS were updated based on the September 17, 2012 Experience Investigation completed by Cavanaugh Macdonald for the Retirement System and confirmed in the June 30, 2012 valuation report.

The salary scale, retirement rates, mortality rates, turnover rates, and disability rates for PJERS were updated based on the September 17, 2012 Experience Investigation completed by Cavanaugh Macdonald and confirmation by Cavanaugh Macdonald that Recommendation #2 was adopted by the System.

The salary scale, retirement rates, mortality rates, turnover rates, and disability rates for ARP were updated to be the same as those for SERS Non-hazardous Tier IIA. No early retirement is assumed and all disabilities are assumed to be not-in-service.

The salary scale, retirement rates, mortality rates, turnover rates, and disability rates for OTHERS were updated to be the same as those for SERS Non-hazardous Tier IIA. All disabilities are assumed to be not-in-service.

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EXHIBIT III

Summary of Plan

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.

Eligibility: Retired and receiving a Normal, Early, Disabled, or Pre-retirement Survivor pension from the following Retirement Plan.

- SERS – State Employees Retirement System.
- JFSMCCRS – Judges, Family Support Magistrates, and Compensation Commissioners Retirement System.
- PJERS – Probate Judges and Employees Retirement System.
- STRS – State Teachers’ Retirement System.
- ARP – Alternate Retirement System.
- HYBRID – Hybrid Defined Benefit/Defined Contribution Plan

In addition, there are a small number of “Other” State employees who are not covered by the retirement systems above but who are eligible for OPEB benefits. As part of the 2009 and 2011 SEBAC agreements, employees with less than 10 years of service as of July 1, 2009, must have 10 years of service to receive retiree medical benefits. In addition, an employee must have a combined age plus service of 75 years to receive retiree medical benefits unless they retire directly from active service. New employees must have 15 years of service to receive retiree medical benefits.

Benefit Types: Medical, prescription drug, dental, life insurance. Prescription drug benefits for Medicare-eligible retirees are provided through a Part D Employer Group Waiver Plan (EGWP). The State also reimburses the Medicare Part B premium for Medicare-eligible retirees.

Probate judges, probate employees, and terminated vested participants are not eligible for life insurance.

Teachers and terminated vested participants are not eligible for pre-retirement death benefits.

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Duration of Coverage:	Lifetime
Spouse Benefits:	Same benefits as for retirees except no life insurance. Spousal coverage is for life if the spouse receives a survivor pension from their retirement system; otherwise coverage ends at the retiree's death.
Retiree Contributions:	
<u>Medical, Rx, and Dental</u>	The monthly retiree contributions used were provided in a schedule supplied by the Office of the State Comptroller.
<u>Health Enhancement Program</u>	As part of the 2011 SEBAC agreement, individuals who retire after October 1, 2011, and who decline participation in the Health Enhancement Program, or who are removed from the program, must pay an additional \$100 per month in premium share.

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Early Retiree Premiums

As part of the 2011 SEBAC agreement, individuals who elect early retirement will be charged the greater of the retiree contribution described above and a percentage of the premium (as described on the following page) until they reach their normal retirement date, or age 65, whichever is earlier. The percentages will also be applied to individuals who are eligible for a deferred vested benefit that elect to receive their pension benefits before age 65. If the participant has fewer than 15 years of service, 15 years is used. If the participant has more than 25 years of service, 25 years is used. If the participant retires more than 5 years early, 5 years is used. The premium is capped at 25% of the person's actual pension benefit.

		Years Retired Early				
		5	4	3	2	1
Years of Service	15	40.00%	32.00%	24.00%	16.00%	8.00%
	16	37.00%	29.60%	22.20%	14.80%	7.40%
	17	34.00%	27.20%	20.40%	13.60%	6.80%
	18	31.00%	24.80%	18.60%	12.40%	6.20%
	19	28.00%	22.40%	16.80%	11.20%	5.60%
	20	25.00%	20.00%	15.00%	10.00%	5.00%
	21	22.00%	17.60%	13.20%	8.80%	4.40%
	22	19.00%	15.20%	11.40%	7.60%	3.80%
	23	16.00%	12.80%	9.60%	6.40%	3.20%
	24	13.00%	10.40%	7.80%	5.20%	2.60%
25	10.00%	8.00%	6.00%	4.00%	2.00%	

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Employee Contributions:

As part of the 2009 and 2011 SEBAC agreements, current active employees pay a percentage of their pay into the Retiree Health Care Trust Fund for pre-funding of OPEB benefits.

All employees hired after July 1, 2009, or with fewer than five years of service as of July 1, 2010, are contributing 3.0% of their salaries to the Fund, for a period of 10 years or until their retirement, whichever is sooner.

All employees not paying into the Fund as of June 30, 2013, will begin paying a contribution at that time. The contribution will be 0.5% for the year beginning July 1, 2013, increasing to 2.0% for the year beginning July 1, 2014, and to 3.0% for the year beginning July 1, 2015. Contributions will continue for a period of 10 years or until the employee retires, whichever is sooner.

Contributions are refundable to employees who leave State employment prior to completing 10 years of service.

Effective July 1, 2017, the State will begin to contribute into the Retiree Health Care Trust Fund an amount equal to the amount contributed by employees each year.

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Benefit Descriptions:

Medical (Anthem or UnitedHealthcare)

Point of Service	In-Network	Out-Of-Network
<i>Deductible</i>	\$350/person, up to \$1,400/family*	\$300/person, up to \$900/family
<i>Member Coinsurance</i>	None	80%
<i>Out-of-pocket Maximum (not incl. ded.)</i>	None	\$2,000/\$4,000 single/family
<i>Office Visit Copay</i>	\$15**	Deductible and coinsurance
<i>Emergency Room Copay</i>	\$35 (waived if admitted)	\$35 (waived if admitted)

Point of Enrollment, Out of Area	Participating Provider
<i>Deductible</i>	\$350/person, up to \$1,400/family*
<i>Member Coinsurance</i>	None
<i>Out-of-pocket Maximum (not incl. ded.)</i>	None
<i>Office Visit Copay</i>	\$10**
<i>Emergency Room Copay</i>	\$35 (waived if admitted)

* Waived for post-October 2011 retirees enrolled in Health Enhancement Program.

** \$5 copay for retirees who retired prior to July 1, 1999.

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Prescription Drug (CVS Caremark)

Retirement Date Prior to 5/1/2009	34-Day Supply Retail or 3-Month Supply Mail	
<i>Generic</i>	\$3	
<i>Brand-name (no generic available)</i>	\$6	
<i>Brand-name (with generic available)</i>	\$3 plus difference between brand and generic cost	

Retirement Date 6/1/2009 to 10/1/2011	34-Day Supply Retail or 3-Month Supply Mail	
<i>Generic</i>	\$5	
<i>Preferred brand-name</i>	\$10	
<i>Non-preferred brand-name</i>	\$25 (\$10 if non-preferred is medically necessary)	

Retirement Date 10/2/2011 or Later	Non-Maintenance Drug (34-Day Supply)	Maintenance Drug (3-month Supply*)
<i>Generic</i>	\$5	\$5
<i>Preferred brand-name</i>	\$20	\$10
<i>Non-preferred brand-name</i>	\$35	\$25
<i>Mail Order Program</i>	N/A	Mandatory for under-65 retirees; optional for over-65 retirees.

* If enrolled in Health Enhancement Program, copay for drugs prescribed for certain chronic conditions will be waived or reduced to \$0/\$5/\$12.50.

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Dental

	United Basic	United Enhanced	CIGNA DHMO
<i>Deductible</i>	None	\$25/\$75 single/family	None
<i>Annual Maximum</i>	\$500* for periodontics	\$3,000	None
<i>Exam and X-rays*</i>	Covered at 80%	Covered at 100%	Covered at 100%
<i>Simple Restoration</i>			
<i>Fillings</i>	Covered at 80%	Covered at 80%	Covered w/ copay
<i>Oral Surgery</i>	Covered at 67%	Covered at 67%	Covered w/ copay
<i>Major Restoration</i>			
<i>Crowns</i>	Covered at 67%	Covered at 67%	Covered w/ copay
<i>Dentures, Fixed Bridges</i>	Not covered	Covered at 50%	Covered w/ copay
<i>Orthodontia</i>	Not covered	\$1,500 lifetime maximum per person	Covered w/ copay

* If enrolled in the Health Enhancement Program, annual dental cleaning (up to two) and unlimited periodontal care provided.

Life Insurance

Pay-related coverage, equal to 50% of the basic coverage amount immediately before retirement. The basic coverage amount is a function of the employee's salary and the position held by the employee. The minimum post-retirement coverage amount is \$10,000 for employees with 25 or more years of service.

For retirees with less than 25 years of service, the above coverage amount is proportionately reduced based on years of service, and has no minimum amount of coverage.

Members who retire under the hazardous duty provisions of C.G.S. 5-173 receive coverage equal to 50% of the basic coverage amount immediately before retirement, regardless of the number of years of service.

Retired members who are totally and permanently disabled before age 60 receive coverage equal to 100% of the basic coverage amount.

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Plan Changes since Prior Valuation:

This report includes the following plan changes agreed to in the SEBAC 2009 and the REVISED SEBAC 2011 agreements between the State of Connecticut and the State Employees Bargaining Agent Coalition that were not reflected in the June 30, 2011 valuation.

- The Normal Retirement Age for SERS Teirs II and IIA was changed for members who retire after July 1, 2022.
- SERS Tier III plan provisions were introduced for members hired after July 1, 2011.
- The HYBRID Defined Benefit/Defined Contribution Plan was introduced for members of the ARP plan.

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EXHIBIT IV

Definitions of Terms

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.

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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Actuarial Value of Assets (AVA):	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.
Funded Ratio:	The ratio AVA/AAL.
Unfunded Actuarial Accrued Liability (UAAL):	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.
Amortization of the Unfunded Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return (discount rate):	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.
Covered Payroll:	Annual reported salaries for all active participants on the valuation date.
ARC as a Percentage of Covered Payroll:	The ratio of the annual required contribution to covered payroll.
Health Care Cost Trend Rates:	The annual rate of increase in net claims costs per individual benefiting from the Plan.
Annual Required Contribution (ARC):	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

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.

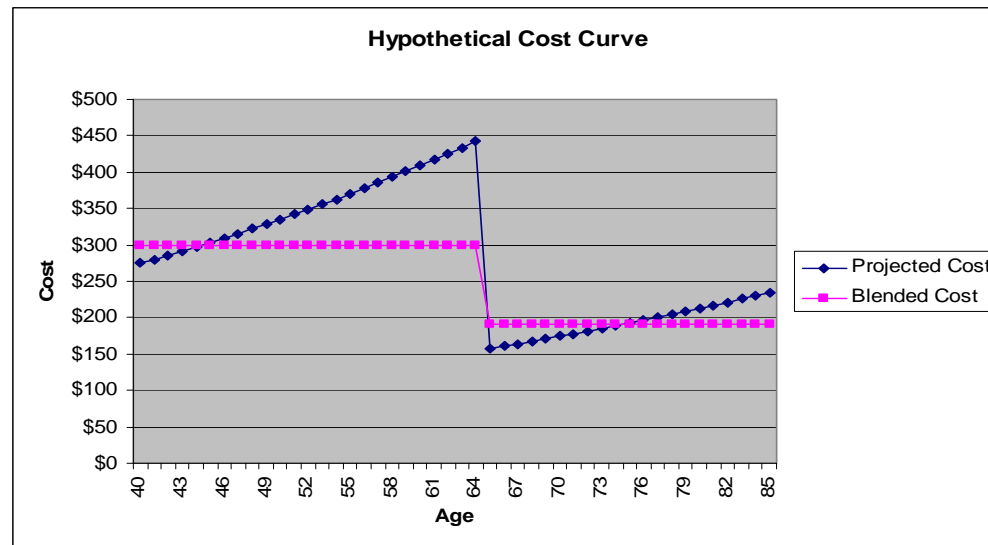
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**EXHIBIT VI
GASB 43/45 Concepts**

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

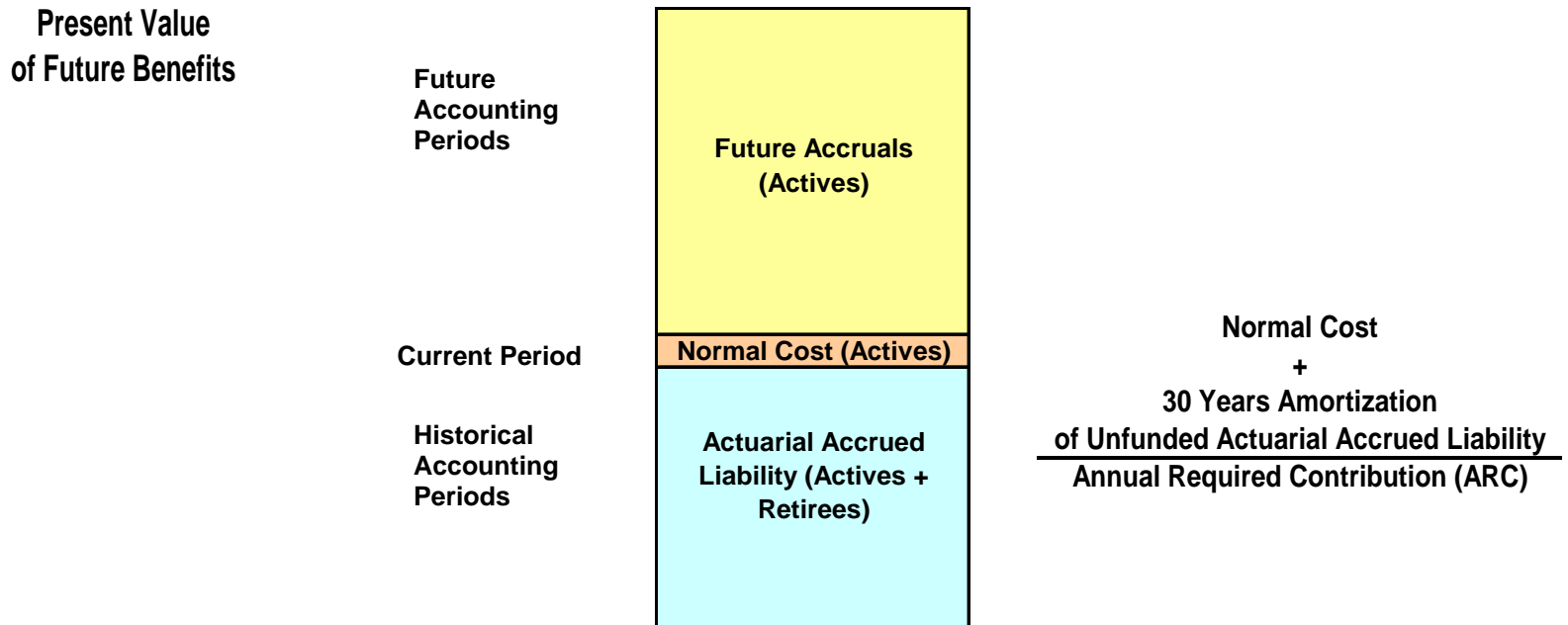
subsidy for these retirees. The accounting standard requires the employer to identify and account for this implicit subsidy as well as any explicit subsidies the employer may provide.



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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



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