

RHODE ISLAND STATE EMPLOYEES' AND ELECTING TEACHERS OPEB ACTUARIAL VALUATION REPORT JUNE 30, 2011

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May 18, 2012

Mr. Thomas Mullaney State Budget Officer Department of Administration Building One Capitol Hill Providence, Rhode Island 02908

Re: Rhode Island State Employees' and Electing Teachers OPEB Actuarial Valuation as of June 30, 2011

Dear Mr. Mullaney:

The results of the June 30, 2011 Annual Actuarial Valuation of the Rhode Island State Employees' and Electing Teachers OPEB are presented in this report.

This report was prepared at the request of the Board and is intended for use by the State of Rhode Island and those designated or approved by the State. This report may be provided to parties other than the State only in its entirety and only with the permission of the State.

The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal years ending June 30, 2014 and June 30, 2015, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statements No. 43 and 45.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the State as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

One or more of the undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Please see the following page for additional disclosures required by the Actuarial Standards of Practice.

Mr. Thomas Mullaney May 18, 2012 Page 2

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose described in the prior page. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The signing actuaries are independent of the plan sponsor.

The valuation was based upon information furnished by the State of Rhode Island, concerning OPEB benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the State.

Respectfully submitted,

David T. Kausch, FSA, EA, MAAA

David Thouseh

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DTK/RJD:lr Enclosures



#### Introduction

This is the June 30, 2011 actuarial valuation of the Rhode Island State Employees' and Electing Teachers OPEB which covers State Employees, State Police, Judges, Legislators, Teachers and the Board of Governors. This report describes the current actuarial condition of the plan, determines the recommended employer contribution rates, and analyzes the changes in principal values.

The contribution rates are determined actuarially based on the plan provisions in effect as of the valuation date, the actuarial assumptions adopted by the OPEB Board, and the methodology set forth in the statutes. The OPEB Board's current policy is that the contribution rates determined by a given actuarial valuation become effective two years after the valuation date. For example, the rates determined by this June 30, 2011 valuation will be applicable for the years July 1, 2013 through June 30, 2014 and July 1, 2014 through June 30, 2015.

#### PLAN EXPERIENCE

Overall plan experience for the Plan was unfavorable resulting in an actuarial loss. Results varied among the groups with losses for Judges, State Employees and State Police, and gains for Legislators, Teachers and Board of Governors.

Health care experience varied for the pre-65 plans depending on the group but overall was close to expected. Post-65 experience on the Medicare Advantage HMO was unfavorable whereas experience on Plan 65 was favorable.

Additional information on gains and losses is on page A-4.

#### FINANCING OBJECTIVES

The actuarial cost method and the amortization periods are set by statute. Contribution rates and liabilities are computed using the Entry Age Normal actuarial cost method. The employer contribution rate is the sum of two pieces: the normal cost rate and the amortization rate. The normal cost rate is determined as a percent of pay. The amortization rate is determined as a level percent of pay for State Employees, State Police and the Board of Governors, and as a level dollar for Teachers, Judges and Legislators. It is the amount required to amortize the unfunded actuarial accrued liability over a closed period (30 years as of June 30, 2006, 25 years remaining as of June 30, 2011). Separate employer contribution rates are determined for State Employees, State Police, Judges, Legislators, Teachers and the Board of Governors. The amortization period for Teachers has been shortened to provide for adequate funding due to the particular nature of their anticipated cash flows over the next few years.

A summary of principal valuation results is shown on the following page.

#### (All dollars in Thousands)

	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors
Valuation Date:	June 30, 2011	June 30, 2011	June 30, 2011	June 30, 2011	June 30, 2011	June 30, 2011
	•	•	,	,		
ARC for Fiscal Year Ending:	June 30, 2014	June 30, 2014	June 30, 2014	June 30, 2014	June 30, 2014	June 30, 2014
Annual Required Contributions (ARC):						
Annual Amount (Total for all groups)	\$ 15	\$ 0	\$ 52,668	\$ 1,370	\$ 7,626	\$ 3,741
Percentage of Projected Covered Payroll	0.12%	0.00%	7.80%	N/A	39.00%	2.65%
Employer Contribution*	0.12%	0.00%	7.38%	\$ 868	39.00%	2.30%
Membership						
Number of						
Active Members	64	112	11,368	-	214	2,035
Retirees and Beneficiaries	70	116	9,340	1,811	352	809
Inactive, Nonretired Members	-	-	-	-		
Total	134	228	20,708	1,811	566	2,844
Covered Payroll	\$10,813	\$ 1,615	\$600,273	N/A	\$17,384	\$125,340
Assets						
Actuarial Value	\$ 841	\$ 1,442	\$ 11,545	\$ 2,040	\$ 1,488	\$ 3,189
Actuarial Information						
Normal Cost	0.00%	0.00%	2.44%	N/A	19.49%	0.99%
Actuarial Accrued Liability (AAL)	\$ 2,610	\$1,443	\$786,293	\$11,512	\$81,759	\$ 53,751
Unfunded Actuarial Accrued Liability (UAAL)	1,769	1	774,748	9,472	80,271	50,562
Funded Ratio	32%	100%	1%	18%	2%	6%
UAAL as % of Covered Payroll	16.4%	0.1%	129.1%	N/A	461.8%	40.3%
Equivalent Single Amortization Period	25 years	25 years	25 years	4 years	25 years	25 years

<sup>\*</sup> For the 2014 and 2015 fiscal years, the employer contribution is the ARC net of a credit for the residual balance from the predecessor fund and health windows and contributions.

#### **CONTRIBUTION RATES**

The total Annual Required Contribution (ARC) for the fiscal year beginning July 1, 2013 was determined to be \$65,419,145 (based on a discount rate of 5.00%). The contribution rates as a percent of payroll changed from 6.86% in the prior fiscal year to 7.80% for State Employees, 33.18% to 39.00% for State Police, 7.19% to 0.12% for Judges, 46.35% to 0.00% for Legislators, and 2.69% to 2.65% for the Board of Governors. Contributions as a dollar amount changed from \$2,600,927 to \$1,369,722 for Teachers.

The expected employer portion of the claims and premium amounts paid is estimated to total \$51,637,435 for the fiscal year beginning July 1, 2013 and \$53,400,735 for the fiscal year beginning July 1, 2014.

For additional details, please see Sections A and C of the report.

#### **BENEFIT PROVISIONS**

Judges and Legislators who are eligible for Medicare must enroll in Medicare and a complementary plan. Current Judge and Legislator retirees will be able to continue on the Active Package, provided they enroll in Medicare A and B.

Under RIRSA legislation, enacted November 2011, eligibility conditions for pension retirement have changed for State Employees, Teachers, and Judges and State Police. We have anticipated the delay in retirements in this valuation in a manner similar to our understanding of the approaches taken by the respective retirement systems. Strictly speaking, OPEB benefits were not changed, however we have shown the impact as a change in benefit provisions.

State Police Officers receive the active health care benefits at the same co-share they were paying as of their retirement date up to age 65.

There were no reported changes in benefit provisions for the Board of Governors since the prior valuation.

A description of the Plan provisions used in this valuation is in Section E of this report. An analysis of the impact of benefit provision changes on the unfunded actuarial accrued liability appears in the gain/loss development on page A-4.

#### **ACTUARIAL ASSUMPTIONS**

There have been changes in actuarial assumptions since the prior valuation. These changes include reflecting new assumptions adopted by the Employees Retirement System of Rhode Island (ERSRI), and the State Police Retirement Benefits Trust of Rhode Island (SPRBT), changes to the OPEB specific assumptions, and changes to reflect the potential excise tax under the Patient Protection and Affordable Care Act.

Changes from the ERSRI and SPRBT experience studies include changes to the retirement and disability rates for ERSRI and changes to salary expectations and mortality for both ERSRI and SPRBT. We are relying on the actuary of the ERSRI and SPRBT for the reasonableness and accuracy of experience based assumptions for those systems. For purposes of this OPEB valuation, we incorporated the ERSRI changes for State Employees and Teachers and SPRBT for State Police (DB and DC) consistent with the respective retirement systems. For the Board of Governors, we applied the same changes to assumptions that we applied to State Employees. For Judges and Legislators, we applied the changes in the mortality assumption that we applied to State Employees.

The new mortality assumptions used by ERSRI and SPRBT include a provision for future mortality improvement by using generational mortality. Generational mortality assumes continued future improvements in mortality rates. The intent is to keep ahead of future mortality improvements in order to avoid future losses as retirees live longer. The generational mortality approach is generally more conservative and has a material impact on this valuation. For this reason, we have separately itemized the impact of this assumption change.

Changes to the OPEB specific assumptions include a change in the medical trend assumption of 9% decreasing to 4.5% in 8 years to 9% decreasing to 4.0% in 10 years, a change in the Medicare election rate for Legislators from 75% electing Medicare to 100% electing Medicare and the addition of the assumption that current retired Teachers over age 65 in the Early Retiree Plan are assumed to not be eligible for Medicare.

The Patient Protection and Affordable Care Act includes an excise tax on high cost (Cadillac) health plans beginning in 2018. The excise tax is 40% of costs above a threshold. Under our valuation assumptions, we anticipate that the Active and Early Retiree Plans will be subject to the excise tax as early as 2018 and we have increased the liability to reflect the anticipated tax.

An analysis of the impact of assumption changes on the unfunded actuarial accrued liability appears in the gain/loss development on page A-4.

#### **EXECUTIVE SUMMARY (CONCLUDED)**

#### **ACTUARIAL METHODS**

There have been changes in actuarial methods since the prior valuation. Since the State has begun fully funding the ARC, we have incorporated anticipated employer contributions between the valuation date and the applicable fiscal year when determining the ARC. This change has no impact on the unfunded actuarial accrued liability.

With the establishment of the trust and full funding of the ARC, we recommend adopting an asset smoothing method. This valuation includes a 4-year asset smoothing method that is common in the public sector.

The amortization method for Judges and Legislators was changed from a closed 25-year level percent amortization to a closed 25-year level dollar amortization as described on page A-9.

An analysis of the impact of method changes on the unfunded actuarial accrued liability appears on page A-4.

#### DATA

The State supplied data for retired and active members as of June 30, 2011. We did not audit this data, but we did apply a number of validation tests to the data. There were significant changes in the data compared to the prior valuation. Based on review of the data provided for the current valuation and discussions with staff, we concluded that the current valuation data was acceptable.

## SECTION A VALUATION RESULTS

## VALUATION RESULTS DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTIONS AS OF JULY 1, 2013

#### Interest Rate – 5.00%

Contributions for	Development of the Annual Required Contributions for the July 1, 2013 - June 30, 2014 Fiscal Year							
	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors		
Employer Normal Cost  Percentage of Projected Payroll  Amortization of Unfunded Actuarial  Accrued Liabilities  Percentage of Projected Payroll  Amortization Period	\$ 0 0.00% 15,082 0.12% 25 Years	\$ 0 0.00% 0 0.00% 25 Years	\$ 16,475,506 2.44% 36,192,095 5.36% 25 Years	\$ 0 N/A 1,369,722 N/A 4 Years	\$ 3,811,097 19.49% 3,815,008 19.51% 25 Years	\$ 1,401,025 0.99% 2,339,610 1.66% 25 Years		
Annual Required Contribution (ARC)  Percentage of Projected Payroll	\$ 15,082 0.12%	\$ 0 0.00%	\$ 52,667,601 7.80%	\$ 1,369,722 N/A	\$ 7,626,105 39.00%	\$ 3,740,635 2.65%		
Credit for Residual Balance from Predecessor Fund Total Projected Health Windows Revenue Subtotal Percentage of Projected Payroll			2,135,316 <u>700,632</u> 2,835,948 0.42%	501,749 <u>0</u> 501,749 <i>N/A</i>		494,883 <u>0</u> 494,883 0.35%		
Net Employer Contribution*  Percentage of Projected Payroll			49,831,653 7.38%	867,973 <i>N/A</i>		3,245,752 2.30%		
Projected Payroll for the Fiscal Year Beginning July 1, 2013	\$12,163,402	\$1,816,113	\$675,225,657	N/A	\$19,554,116	\$140,990,467		

<sup>\*</sup> For the 2014 and 2015 fiscal years, the employer contribution is the ARC net of a credit for the residual balance from the predecessor fund and health windows and contributions.

Contribution notes apply to the fiscal years ending June 30, 2014 and June 30, 2015. The assumptions used to calculate the results shown above include a 5.00% investment return rate. This rate is intended to be a blend of a short-term and long-term investment return assumption as the trust gets established.

The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll for State Employees, State Police, and the Board of Governors, and as a level dollar amount for Judges, Legislature and Teachers over the periods shown. The amortization factors used are 14.4434 for the 25-year level dollar amortization, 21.8047 for the 25-year level percent of pay amortization and 3.6339 for the 4-year level dollar amortization.

## VALUATION RESULTS DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2011

#### Interest Rate – 5.00%

	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors
A. Present Value of Future Benefits						
Retirees and Beneficiaries	\$2,609,870	\$1,442,528	\$483,714,429	\$11,511,941	\$ 41,748,915	\$23,467,864
2. Vested Terminated Members	0	0	0	0	0	0
3. Active Members	0	0	462,974,963	0	71,491,046	57,488,407
Total Present Value of Future Benefits	\$2,609,870	\$1,442,528	\$946,689,392	\$11,511,941	\$113,239,961	\$80,956,271
B. Present Value of Future Total Normal Costs	0	0	160,396,085	0	31,481,088	27,204,998
C. Actuarial Accrued Liability (AB.)	\$2,609,870	\$1,442,528	\$786,293,307	\$11,511,941	\$ 81,758,873	\$53,751,273
D. Actuarial Value of Assets	841,163	1,442,052	11,544,955	2,040,166	1,487,613	3,188,898
E. Unfunded Actuarial Accrued Liability (CD.)	\$1,768,707	\$476	\$774,748,352	\$ 9,471,775	\$ 80,271,260	\$50,562,375
F. Funded Ratio (D./C.)	32%	100%	1%	18%	2%	6%

The Unfunded Actuarial Accrued Liability (UAAL) is not booked as an expense all in one year and does not appear in the Employer's Statement of Net Assets. Nevertheless, it is reported in the Notes to the Financial Statements and in the Required Supplementary Information. These are information sections within the employer's financial statements. For additional information on required disclosures see Section G.

#### **DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

Year Ended June 30:	2011	2012	2013	2014
<ul><li>A. Actuarial Value Beginning of Year</li><li>B. Market Value End of Year</li></ul>	\$21,002,764			
C. Market Value Beginning of Year	-			
D. Non-Investment Net Cash Flow	19,894,837			
E. Investment Income				
E1. Market Total: B - C - D	1,107,927			
E2. Amount for Immediate Recognition (5%)	497,371			
E3. Amount for Phased-In Recognition: E1-E2	610,556			
F. Phased-In Recognition of Investment Income				
F1. Current Year: 0.25 x E3	152,639			
F2. First Prior Year	-	\$152,639		
F3. Second Prior Year	-	-	\$152,639	
F4. Fourth Prior Year	-	-	-	\$152,639
F5. Total Recognized Investment Gain	152,639	152,639	152,639	152,639
G. Preliminary Actuarial Value End of Year: $A + D + E2 + F5$	20,544,847			
H. 80% of Market Value End of Year: 80% x B	16,802,211			
I. 120% of Market Value End of Year: 120% x B	25,203,317			
J. Additional Recognized G/L due to Corridor	-			
K. Final Actuarial Value after 20% Corridor	20,544,847			
L. Difference between Market & Actuarial Value: B-K	457,917			

The Funding Value of Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased in over a closed 4 year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. The Funding Value of Assets in unbiased with respect to Market Value. At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for four consecutive years, it will become equal to Market Value.

### VALUATION RESULTS GAIN/LOSS ANALYSIS AS OF JUNE 30, 2011

			State			Board of
	Judges	Legislature	<b>Employees</b>	Teachers	State Police	Governors
(1) UAAL* at prior valuation date	\$ 8,664,802	\$ 11,751,749	\$ 673,640,071	\$ 13,528,982	\$ 67,079,150	\$ 47,703,711
(2) Employer normal cost from last valuation for year 1	421,344	378,615	13,989,897	-	3,626,434	1,312,930
(3) Qualified contributions for year 1	173,000	144,000	33,504,000	2,345,000	2,268,000	1,820,629
(4) Interest accrual: [(1)+1/2 [(2)-(3)]] x .05	 439,449	593,453	33,194,151	617,824	3,387,918	2,372,493
(5) Expected UAAL end of year 1: (1)+(2)-(3)+(4)	\$ 9,352,595	\$ 12,579,817	\$ 687,320,119	\$ 11,801,806	\$ 71,825,502	\$ 49,568,505
(6) Employer normal cost from last valuation for year 2	440,304	395,653	14,619,442	-	3,789,624	1,372,012
(7) Qualified contributions for year 2	985,580	1,519,559	41,120,217	2,332,778	4,215,878	2,869,613
(8) Interest accrual: [(5)+1/2 [(6)-(7)]] x .05	 453,998	600,893	33,703,487	531,771	3,580,619	2,440,985
(9) Expected UAAL end of year 2: (5)+(6)-(7)+(8)	\$ 9,261,317	\$ 12,056,804	\$ 694,522,831	\$ 10,000,799	\$ 74,979,867	\$ 50,511,889
(10) Change in methods	18,748	32,141	257,322	45,473	33,157	71,076
(11) Change in actuarial assumptions						
(a) Mortality Assumption Change	659,006	692,473	39,770,951	540,015	1,101,049	3,421,110
(b) Other Assumption Changes	-	-	2,206,175	-	740,410	268,774
(c) Excise Tax	 16,010	106,509	27,798,117	816,005	5,633,294	1,369,464
(d) Subtotal	\$ 675,016	\$ 798,982	\$ 69,775,243	\$ 1,356,020	\$ 7,474,753	\$ 5,059,348
(12) Change in plan provisions	 (8,216,060)	(12,404,655)	(23,041,695)		(11,436,100)	
(13) Expected UAAL after changes: Sum (9) through (12)	\$ 1,739,021	\$ 483,272	\$ 741,513,701	\$ 11,402,292	\$ 71,051,677	\$ 55,642,313
(14) Actual UAAL at end of year	\$ 1,768,707	\$ 476	\$ 774,748,352	\$ 9,471,775	\$ 80,271,260	\$ 50,562,375
(15) Gain/(loss) as of the valuation date (13)-(14)	(29,686)	482,796	(33,234,651)	1,930,517	(9,219,583)	5,079,938
(16) Gain/(loss) as percent of actuarial accrued						
liabilities at prior valuation date	(0.3)%	4.1 %	(4.9)%	14.3 %	(13.7)%	10.6 %

<sup>\*</sup> Unfunded Actuarial Accrued Liabilities – All groups valued at 5.0% interest. Note that the ARC for the prior fiscal year regarding June 30, 2011 was based on a 5% discount rate. Information regarding the impact of the change in discount rate may be found in the June 30, 2009 report.

## ALTERNATE RESULTS - I DEVELOPMENT OF ILLUSTRATIVE CONTRIBUTION RATES AS OF JULY 1, 2013

#### Interest Rate – 3.566%

Contributions for	Development of the Illustrative Contribution Rates for the July 1, 2013 - June 30, 2014 Fiscal Year								
	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors			
Employer Normal Cost  Percentage of Projected Payroll  Amortization of Unfunded Actuarial	\$ 0 0.00%	\$ 0 0.00%	\$ 23,497,853 3.48%	\$ 0 N/A	\$ 4,982,389 25.48%	\$ 2,622,422 1.86%			
Accrued Liabilities  Percentage of Projected Payroll	32,455 0.27%	0.00%	35,989,528 5.33%	1,609,505 <i>N/A</i>	3,685,951 18.85%	2,481,432 1.76%			
Amortization Period  Illustrative Contributions	25 Years \$ 32,455	25 Years <b>\$0</b>	25 Years \$ <b>59,487,381</b>	4 Years <b>1,609,505</b>	25 Years \$ <b>8,668,340</b>	25 Years \$ <b>5,151,971</b>			
Percentage of Projected Payroll	0.27%	0.00%	8.81%	N/A	44.33%	3.65%			
Credit for Residual Balance from Predecessor Fund Total Projected Health Windows Revenue Subtotal Percentage of Projected Payroll			2,135,316 <u>700,632</u> 2,835,948 0.42%	501,749 <u>0</u> 501,749 <i>N/A</i>		494,883 <u>0</u> 494,883 0.35%			
Net Employer Contribution*  Percentage of Projected Payroll			56,651,433 8.39%	1,107,756 <i>N/A</i>		4,657,088 3.30%			
Projected Payroll for the Fiscal Year Beginning July 1, 2013	\$12,163,402	\$1,816,113	\$675,225,657	N/A	\$19,554,116	\$140,990,467			

<sup>\*</sup> For the 2014 and 2015 fiscal years, the employer contribution is the ARC net of a credit for the residual balance from the predecessor fund and health windows and contributions.

The results on this page are calculated under the investment return assumption used in the prior valuation of 3.566%. The prior assumption was based on the former employer funding policy to contribute only the pay-as-you-go health care premium/claims contributions and have no plan assets. Therefore, under this former policy the employer assumed an investment return assumption similar to that of the general fund earnings.

# ALTERNATE RESULTS - I DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2011

#### Interest Rate – 3.566%

	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors
A. Present Value of Future Benefits	- suages	Legislature	State Employees	reactions	State Fonce	GOVERNOS
Retirees and Beneficiaries	\$2,937,410	\$ 1,628,122	\$ 557,520,053	\$12,664,127	\$ 46,465,561	\$ 26,961,351
2. Vested Terminated Members	0	0	0	0	0	0
3. Active Members	0	0	631,162,957	0	92,346,510	84,477,561
Total Present Value of Future Benefits	\$2,937,410	\$1,628,122	\$1,188,683,010	\$12,664,127	\$138,812,071	\$111,438,912
B. Present Value of Future Total Normal Costs	0	0	263,379,256	0	45,810,401	46,297,840
C. Actuarial Accrued Liability (AB.)	\$2,937,410	\$1,628,122	\$ 925,303,754	\$12,664,127	\$ 93,001,670	\$ 65,141,072
D. Actuarial Value of Assets	841,163	1,442,052	11,544,955	2,040,166	1,487,613	3,188,898
E. Unfunded Actuarial Accrued Liability (CD.)	\$2,096,247	\$186,070	\$ 913,758,799	\$10,623,961	\$ 91,514,057	\$ 61,952,174
F. Funded Ratio (D./C.)	29%	89%	1%	16%	2%	5%

## ALTERNATE RESULTS - II DEVELOPMENT OF ILLUSTRATIVE CONTRIBUTION RATES AS OF JULY 1, 2013

#### Interest Rate – 7.00%

Contributions for	Development of the Illustrative Contribution Rates for the July 1, 2013 - June 30, 2014 Fiscal Year							
	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors		
Employer Normal Cost  Percentage of Projected Payroll  Amortization of Unfunded Actuarial	\$ 0 0.00%	\$ 0 0.00%	\$ 9,858,294 1.46%	\$ 0 <i>N/A</i>	\$ 2,622,207 13.41%	\$ 328,268 0.23%		
Accrued Liabilities  Percentage of Projected Payroll	0.00%	0.00%	36,192,095 5.36%	1,083,209 <i>N/A</i>	3,951,887 20.21%	2,135,301 1.51%		
Amortization Period	25 Years	25 Years	25 Years	4 Years	25 Years	25 Years		
Illustrative Contributions Percentage of Projected Payroll	\$ 0 0.00%	\$ 0 0.00%	\$ 46,050,389 6.82%	\$ 1,083,209 N/A	\$ 6,574,094 33.62%	\$ 2,463,569 1.75%		
Credit for Residual Balance from Predecessor Fund Total Projected Health Windows Revenue Subtotal Percentage of Projected Payroll			2,135,316 <u>700,632</u> 2,835,948 0.42%	501,749 0 501,749 <i>N/A</i>		494,883 <u>0</u> 494,883 0.35%		
Net Employer Contribution*  Percentage of Projected Payroll			43,214,441 6.40%	581,460 <i>N/A</i>		1,968,686 <i>1.40%</i>		
Projected Payroll for the Fiscal Year Beginning July 1, 2013	\$12,163,402	\$1,816,113	\$675,225,657	N/A	\$19,554,116	\$140,990,467		

<sup>\*</sup> For the 2014 and 2015 fiscal years, the employer contribution is the ARC net of a credit for the residual balance from the predecessor fund and health windows and contributions.

The results on this page are calculated under an alternate investment return assumption of 7.00%. These results are intended to illustrate the effect of an investment policy of trust assets consistent with most funded retiree benefits plans. For additional discussion see Comment A on page A-9.

# ALTERNATE RESULTS - II DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2011

#### **Interest Rate – 7.00%**

	Judges	Legislature	State Employees	Teachers	State Police	Board of Governors
A. Present Value of Future Benefits						
Retirees and Beneficiaries	\$2,246,041	\$1,240,850	\$406,701,501	\$ 10,222,849	\$36,388,035	\$19,732,478
2. Vested Terminated Members	0	0	0	0	0	0
3. Active Members	_0	_0	310,126,119	_0	51,378,235	35,826,453
Total Present Value of Future Benefits	\$2,246,041	\$1,240,850	\$716,827,620	\$ 10,222,849	\$87,766,270	\$55,558,931
B. Present Value of Future Total Normal Costs	0	0	81,408,372	0	13,548,120	13,548,120
C. Actuarial Accrued Liability (AB.)	\$2,246,041	\$1,240,850	\$635,419,248	\$ 10,222,849	\$74,218,150	\$42,010,811
D. Actuarial Value of Assets	841,163	1,442,052	11,544,955	2,040,166	1,487,613	3,188,898
E. Unfunded Actuarial Accrued Liability (CD.)	\$1,404,878	\$ (201,202)	\$623,874,293	\$ 8,182,683	\$72,730,537	\$38,821,913
F. Funded Ratio (D./C.)	37%	116%	2%	20%	2%	8%

#### **COMMENTS**

COMMENT A: One of the key assumptions used in any valuation of the cost of postemployment benefits is the long-term rate of investment return on plan assets. Higher assumed investment returns will result in a lower Annual Required Contribution (ARC). Lower returns will result in a higher ARC. Since the last valuation, the State has established a qualified OPEB trust and begun fully funding the ARC. We have calculated the liability and the resulting ARC using assumed investment return of 5.00%. This report also includes alternate assumptions of 3.566% (consistent with the prior valuation and the former pay-as-you-go funding policy) and 7.00%. Ultimately, the long-term rate of return assumption will be based on the investment policy and objectives as set by the Board. As the amount of assets under investment grows, we recommend reviewing the assumed rate of investment return and updating it as appropriate.

**COMMENT B:** The State anticipates receiving a reimbursement from the Federal Government of approximately \$5 million during the fiscal year ending June 30, 2012 in conjunction with its application for the Early Retiree Reinsurance Program (ERRP). For purposes of this valuation, these monies are assumed to be contributed to the State Employees in addition to the ARC for FY2012. We did not project receiving any ERRP in the future since the program has exhausted its federal budget of \$5 billion.

**COMMENT C:** As of June 30, 2011, there was deferred revenue for the State Employees, Teachers, and Board of Governors of approximately \$6 million in total. Our understanding is that these monies consist of residual employer contributions made before the qualified trust was established and are to be transferred into the qualified trust during the 2014 and 2015 fiscal years and applied toward the ARC. In addition, the State receives certain contributions from the Health Windows Program. The employer contribution rate for the affected groups is adjusted down from the ARC on page A-1 to reflect this procedure.

**COMMENT D:** The contribution rates shown include amortization of the unfunded actuarial accrued liability over 4 years for Teachers and 25 years for the other groups. The Teachers, Judges, and Legislators groups now pay the full Early Retiree or Post 65 premium rate and are therefore amortized as a level dollar amount. The State Employees, Police, and Board of Governors remain open plans and are therefore amortized as a level percent of payroll. Legislation 2008-H7204 requires a 30-year amortization period beginning June 30, 2006 with 25 years remaining as of June 30, 2011. In an underfunded plan, shorter amortization periods would result in higher ARCs. The shorter amortization period used for Teachers was determined based on the short-term expected cash flow needs for the Teachers which differ materially from the other groups due to the nature of the benefits provided by the Plan.

Given the recent changes to Plan benefits for State Employees in particular, the ARC as a percentage of payroll is expected to be only marginally higher than expected cash flows for the next few years. In the longer term, the ARC is expected to grow with payroll at the assumed 4.0% per year while the benefits are projected to grow less quickly and thus the excess of contributions over benefits is expected to grow. A shorter amortization period would allow for a wider margin between contributions and benefit payments and allow for the trust to build up assets more quickly. We continue to monitor the contributions in comparison to benefits and do not recommend any changes to the amortization periods at this time.

#### **COMMENTS**

COMMENT E: Effective September 30, 2008, the Tier II subsidy was eliminated. Subsequent to that date, a separate Early Retiree premium was introduced to reflect the full cost of pre-65 retiree health care with the retirees and the State sharing in the cost of the full premium. In practice, the Early Retiree premium has not increased as rapidly as the aggregate health care cost on a per capita basis. In effect, this creates an implicit subsidy. Actual experience and retiree contributions are reflected in this valuation resulting in a loss for this rate setting differential. This valuation assumes that future increases in experience will be completely recognized in the premium rates. It is important to note that if future premiums are not accurately adjusted to reflect experience, the valuation must reflect future expected implicit subsidies which could result in substantially higher employer costs.

**COMMENT F:** There have been several material changes since the prior valuation. A summary of the changes and their impact on the ARC is shown below. Note that the prior ARC is based on the June 30, 2009 valuation using a discount rate of 5%. Information regarding the impact of the change in discount rate may be found in the June 30, 2009 report.

			State			Board of
	Judges	Legislature	Employees	Teachers	State Police	Governors
Prior ARC*	7.19 %	46.35 %	6.86 %	\$ 2,600,927	33.18 %	2.69 %
Impact of Plan Experience	(0.45)%	(2.63)%	0.18 %	(380,095)	7.07 %	(0.54)%
Impact of Method Change	0.02 %	0.31 %	0.10 %	(1,262,517)	0.93 %	(0.15)%
Impact of Assumption Changes						
Mortality Assumption Change	1.05 %	6.87 %	0.58 %	163,837	0.69 %	0.38 %
Other Assumption Changes	0.00 %	0.00 %	0.37 %	-	1.31 %	0.11 %
Excise Tax	0.01 %	0.00 %	0.29 %	247,570	2.93 %	0.17 %
Impact of RIRSA and other new legislation	(7.70)%	(50.90)%	(0.58)%	-	(7.11)%	0.00 %
ARC determined by this valuation	0.12 %	0.00 %	7.80 %	\$ 1,369,722	39.00 %	2.65 %

<sup>\*</sup> Prior ARC based on 5% discount rate. Information regarding the impact of the change in discount rate may be found in the June 30, 2009 report.

#### PLAN EXPERIENCE

Overall plan experience for the Plan was unfavorable, resulting in an actuarial loss. Results varied among the groups with losses for Judges, State Employees and State Police, and gains for Legislators, Teachers and Board of Governors.

Health care experience varied for the pre-65 plans depending on the group but overall was close to expected. Post-65 experience on the Medicare Advantage HMO was unfavorable whereas experience on Plan 65 was favorable.

Additional information on gains and losses is on page A-4.

#### BENEFIT PROVISIONS

Judges and Legislators who are eligible for Medicare must enroll in Medicare and a complementary plan. Current Judge and Legislator retirees will be able to continue on the Active Package provided they are enrolled in Medicare A and B.

#### **COMMENTS**

#### BENEFIT PROVISIONS (CONTINUED)

Under RIRSA legislation, enacted November 2011, eligibility conditions for pension retirement have changed for State Employees, Teachers, Judges and State Police. We have anticipated the delay in retirements in this valuation in a manner similar to our understanding of the approaches taken by the respective retirement system. Strictly speaking, OPEB benefits were not changed, however we have shown the impact as a change in benefit provisions. A description of RIRSA retirement eligibility conditions used in this valuation is disclosed in Section F.

State Police Officers receive retiree health care benefits at the same co-share they were paying as of their retirement date up to age 65, based on the Early Retiree rates.

There were no reported changes in benefit provisions for the Board of Governors since the prior valuation.

A description of the Plan Provisions used in this valuation is in Section E of this report.

An analysis of the impact of changes benefit provisions on the unfunded actuarial accrued liability appears in the gain/loss development on page A-4.

#### ACTUARIAL ASSUMPTIONS

There have been changes in actuarial assumptions since the prior valuation. These changes include reflecting new assumptions adopted by the Employees Retirement System of Rhode Island (ERSRI), and the State Police Retirement Benefits Trust of Rhode Island (SPRBT), changes to the OPEB specific assumptions, and changes to reflect the potential excise tax under the Patient Protection and Affordable Care Act.

Changes from the ERSRI and SPRBT experience studies include changes to the retirement and disability rates for ERSRI and changes to salary expectations and mortality for both ERSRI and SPRBT. We are relying on the actuary of the ERSRI and SPRBT for the reasonableness and accuracy of experience based assumptions for those systems. For purposes of this OPEB valuation, we incorporated the ERSRI changes for State Employees and Teachers and SPRBT for State Police (DB and DC) consistent with the respective retirement systems. For the Board of Governors, we applied the same changes to assumptions that we applied to State Employees. For Judges and Legislators, we applied the changes in the mortality assumption that we applied to State Employees.

The new mortality assumptions used by ERSRI and SPRBT include a provision for future mortality improvement by using generational mortality. Generational mortality assumes continued future improvements in mortality rates. The intent is to keep ahead of future mortality improvements in order to avoid future losses as retirees live longer. The generational mortality approach is generally more conservative and has a material impact on this valuation. For this reason, we have separately itemized the impact of this assumption change.

#### **COMMENTS (CONCLUDED)**

#### ACTUARIAL ASSUMPTIONS (CONTINUED)

Changes to the OPEB specific assumptions include a change in the medical trend assumption of 9% decreasing to 4.5% in 8 years to 9% decreasing to 4.0% in 10 years, a change in the Medicare election rate for Legislators from 75% electing Medicare to 100% electing Medicare and the addition of the assumption that current retired Teachers over age 65 in the Early Retiree Plan are assumed to not be eligible for Medicare.

The Patient Protection and Affordable Care Act includes an excise tax on high cost (Cadillac) health plans beginning in 2018. The excise tax is 40% of costs above a threshold. Under our valuation assumptions, we anticipate that the Active and Early Retiree Plans will be subject to the excise tax as early as 2018 and we have increased the liability to reflect the anticipated tax.

An analysis of the impact of assumption changes on the unfunded actuarial accrued liability appears in the gain/loss development on page A-4.

#### **ACTUARIAL METHODS**

There have been changes in actuarial methods since the prior valuation. Since the State has begun fully funding the ARC, we have incorporated anticipated employer contributions between the valuation date and the applicable fiscal year when determining the ARC. This change has no impact on the unfunded actuarial accrued liability.

With the establishment of the trust and full funding of the ARC, we recommend adopting an asset smoothing method. This valuation includes a 4-year asset smoothing method that is common in the public sector.

The amortization method for Judges and Legislators was changed from a closed 25-year level percent amortization to a closed 25-year level dollar amortization as described in Comment D.

An analysis of the impact of method changes on the unfunded actuarial accrued liability appears on page A-4.

**COMMENT G:** The State supplied data for retired, active, and inactive members as of June 30, 2011. We did not audit this data, but we did apply a number of validation tests to the data. There were significant changes in the data compared to the prior valuation. Based on review of the data provided for the current valuation and discussions with staff, we concluded that the current valuation data was acceptable.

**COMMENT H:** It is our understanding that since the establishment of the OPEB trust, the State Employees group has been reclassified as a cost-sharing multiple employer plan where previously it had been classified as an agent multiple employer plan. This affects some of the required disclosures under GASB No. 45. This change has been incorporated in the GASB No. 45 disclosures in this report.

### SECTION B SENSITIVITY ANALYSIS

### SENSITIVITY ANALYSIS POSTEMPLOYMENT HEALTH INSURANCE -- SENSITIVITY TESTS

Actuarial valuations deal with the cost of benefits to be paid in the future. The payments considered will range from one month in the future to decades from the valuation date (for a young, newly hired employee who may retire many years from now and live many years after that). In order to establish a present day cost for these future benefit obligations, the actuary bases the valuation on a number of assumptions about future occurrences. The occurrences that must be considered include employee turnover, pay increases, disablement, retirements, deaths and investment income on anticipated plan assets.

When the benefits being valued are health care benefits, a key factor is the future cost of the medical benefits being promised. This is projected using the current cost of the System's health care benefits and assumed future health care cost increases. The final cost of providing retiree health care benefits will depend upon how the charges for health care services actually increase in the future.

In order to demonstrate how the cost of these benefits can vary depending upon future health care cost increases, we have performed additional valuations based upon alternative health care cost increase assumptions. The schedules on pages B-2 through B-4 compare (i) the computed cost of the retiree health care benefits using the valuation assumptions to (ii) results of alternate valuations. One of the alternate valuations is based upon an optimistic health care cost increase assumption. The other is based upon a more pessimistic health care cost increase assumption. The schedule on page F-12 exhibits the health care cost increase assumptions used in the valuation and the sensitivity analysis.

### SENSITIVITY ANALYSIS FOR THE FISCAL YEAR BEGINNING JULY 1, 2013

The selection of future health care cost increases is one of the key assumptions in determining plan liabilities. If the health care cost trend rates upon which the calculation of the Annual Required Contribution is based were changed to either the pessimistic or optimistic trends noted on page F-12, the annual contribution (illustrated using entry age 25-year, level dollar amortization for Judges and Legislature, entry age 4-year, level dollar amortization for Teachers and entry age 25-year, level percent amortization for State Employees, State Police, and Board of Governors) would change as follows.

#### **JUDGES**

Fiscal Year Beginning July 1, 2013					
Contributions/Payroll for	Intermedia	te Pe	Pessimistic		imistic
Employer Normal Cost of Benefits	\$	0 \$	0	\$	0
Amortization of Unfunded Acturaial Accrued Liabilities	\$ 15,0	82 \$	29,996	\$	1,557
Annual Required Contribution (ARC) ARC as a percentage of projected payroll Projected Annual Payroll	\$ 15,0 0.12 \$12,163,4	%	<b>29,996 0.25%</b> 12,163,402	<b>\$</b> \$12,	1,557 0.01% ,163,402

#### **LEGISLATURE**

Fiscal Year Beginning July 1, 2013 Contributions/Payroll for	Interm	ediate	Pessin	nistic	Optimistic		
Employer Normal Cost of Benefits	\$	0	\$	0	\$	0	
Amortization of Unfunded Acturaial Accrued Liabilities	\$	0	\$	0	\$	0	
Annual Required Contribution (ARC) ARC as a percentage of projected payroll Projected Annual Payroll		0 0.00% 16,113		0 0.00% .6,113	-	0 0.00% 6,113	

### SENSITIVITY ANALYSIS FOR THE FISCAL YEAR BEGINNING JULY 1, 2013

### STATE EMPLOYEES

Fiscal Year Beginning July 1, 2013	Intermediate	Pessimistic	Ontimistic
Contributions/Payroll for	memeuate	1 essimusuc	Optimistic
Employer Normal Cost of Benefits	\$ 16,475,506	\$ 18,028,525	\$ 14,719,920
Amortization of Unfunded Acturaial Accrued Liabilities	\$ 36,192,095	\$ 39,770,791	\$ 33,153,580
Annual Required Contribution (ARC)	\$ 52,667,601	\$ 57,799,316	\$ 47,873,500
ARC as a percentage of projected payroll	7.80%	8.56%	7.09%
Projected Annual Payroll	\$675,225,657	\$675,225,657	\$675,225,657

#### **TEACHERS**

Fiscal Year Beginning July 1, 2013					
Contributions/Payroll for	Intermediate	Pessimistic	Optimistic		
Employer Normal Cost of Benefits	\$ 0	\$ 0	\$ 0		
Amortization of Unfunded Acturaial Accrued Liabilities	\$ 1,369,722	\$ 1,582,076	\$ 1,176,168		
Annual Required Contribution (ARC) ARC as a percentage of projected payroll Projected Annual Payroll	\$ 1,369,722 N/A N/A	\$ 1,582,076 N/A N/A	\$ 1,176,168 N/A N/A		

### SENSITIVITY ANALYSIS FOR THE FISCAL YEAR BEGINNING JULY 1, 2013 (CONCLUDED)

### STATE POLICE

Fiscal Year Beginning July 1, 2013 Contributions/Payroll for	Intermediate	Pessimistic	Optimistic
Employer Normal Cost of Benefits	\$ 3,811,097	\$ 4,198,269	\$ 3,464,989
Amortization of Unfunded Acturaial Accrued Liabilities	\$ 3,815,008	\$ 4,196,313	\$ 3,472,811
Annual Required Contribution (ARC) ARC as a percentage of projected payroll Projected Annual Payroll	\$ 7,626,105 39.00% \$19,554,116	\$ <b>8,394,582 42.93%</b> \$19,554,116	\$ <b>6,937,800</b> 35.48% \$19,554,116

#### **BOARD OF GOVERNORS**

Fiscal Year Beginning July 1, 2013 Contributions/Payroll for	Intermediate	Pessimistic	Optimistic
Employer Normal Cost of Benefits	\$ 1,401,025	\$ 1,671,971	\$ 1,150,217
Amortization of Unfunded Acturaial Accrued Liabilities	\$ 2,339,610	\$ 2,604,929	\$ 2,094,431
Annual Required Contribution (ARC) ARC as a percentage of projected payroll Projected Annual Payroll	\$ 3,740,635 2.65% \$140,990,467	\$ <b>4,276,900</b> 3.03% \$140,990,467	\$ 3,244,648 2.30% \$140,990,467

## **SECTION C BENEFIT PROJECTIONS**

### 20-YEAR BENEFIT PROJECTIONS INTERMEDIATE TREND RATES

The columns titled "Net Health Care Benefits" are the amounts of retiree health care expenditures net of retiree and spouse contributions that we estimate will occur in various years. These amounts are highly dependent on the underlying actuarial assumptions in the valuation. Actual experience over time may vary significantly. Additional detail for each of the groups is provided on the following pages.

#### (Dollar Amounts in Thousands)

Year Ending			Net H	lealth Care Ben	efits		
June 30,	Judges	Legislature	State Employees	Teachers	State Police	BoG	Total
2012	\$204	\$108	\$40,966	\$1,800	\$3,654	\$1,804	\$48,535
2013	213	114	42,236	1,485	4,019	1,978	50,045
2014	220	119	43,681	1,288	4,250	2,076	51,637
2015	226	118	45,145	1,159	4,552	2,197	53,401
2016	229	114	46,760	991	5,159	2,405	55,661
2017	227	116	48,290	860	5,625	2,499	57,618
2018	223	120	49,780	767	5,969	2,656	59,517
2019	219	125	51,042	727	6,445	2,851	61,413
2020	213	122	52,537	701	6,979	3,072	63,626
2021	204	117	53,752	643	7,532	3,290	65,542
2022	194	109	54,497	599	8,087	3,488	66,977
2023	183	105	55,355	565	8,579	3,697	68,487
2024	173	98	56,567	529	8,849	3,912	70,131
2025	162	97	57,679	498	9,265	4,121	71,825
2026	150	91	58,462	477	9,345	4,333	72,861
2027	139	82	59,394	447	9,433	4,549	74,046
2028	127	72	60,043	410	9,502	4,758	74,916
2029	116	69	60,248	371	9,467	4,962	75,235
2030	105	66	59,939	343	9,318	5,149	74,922
2031	94	63	59,215	315	8,836	5,348	73,874
2032	83	60	58,594	287	8,271	5,557	72,854
2033	73	38	58,017	258	8,039	5,772	72,201
2034	63	33	57,296	231	7,847	5,987	71,461

JUDGES
20-YEAR BENEFIT PROJECTIONS
INTERMEDIATE TREND RATES

	L Retin	ees and Covered S	Spouses		II. Total	
	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$
Fiscal Year Ending 6/30	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow
2012	\$ 340,026	\$ (136,343)	\$ 203,683	\$ 340,026	\$ (136,343)	\$ 203,683
2013	354,803	(141,598)	213,205	354,803	(141,598)	213,205
2014	367,350	(146,408)	220,943	367,350	(146,408)	220,943
2015	376,660	(150,054)	226,605	376,660	(150,054)	226,605
2016	379,762	(149,867)	229,894	379,762	(149,867)	229,894
2017	357,142	(129,950)	227,191	357,142	(129,950)	227,191
2018	340,119	(116,374)	223,746	340,119	(116,374)	223,746
2019	334,088	(114,187)	219,900	334,088	(114,187)	219,900
2020	321,011	(107,608)	213,403	321,011	(107,608)	213,403
2021	300,188	(96,014)	204,174	300,188	(96,014)	204,174
2022	285,339	(91,010)	194,330	285,339	(91,010)	194,330
2023	269,819	(85,828)	183,991	269,819	(85,828)	183,991
2024	253,715	(80,511)	173,204	253,715	(80,511)	173,204
2025	237,197	(75,111)	162,086	237,197	(75,111)	162,086
2026	220,381	(69,654)	150,727	220,381	(69,654)	150,727
2027	203,417	(64,183)	139,234	203,417	(64,183)	139,234
2028	186,467	(58,757)	127,710	186,467	(58,757)	127,710
2029	169,683	(53,426)	116,258	169,683	(53,426)	116,258
2030	153,245	(48,225)	105,021	153,245	(48,225)	105,021
2031	137,266	(43,191)	94,075	137,266	(43,191)	94,075
2032	121,919	(38,375)	83,544	121,919	(38,375)	83,544

JUDGES
20-YEAR FUNDING PROJECTIONS
INTERMEDIATE TREND RATES

	(A)	<b>(B)</b>	(C)	<b>(D)</b>	(E)	<b>(F)</b>	(G)	( <b>H</b> )	<b>(I)</b>	( <b>J</b> )
						$= (C) \times 5\% +$	$= (\mathbf{C}) + (\mathbf{D}) +$		= (H) - (G),	
				$= (\mathbf{A}) \mathbf{x} (\mathbf{B})$		$[(D)+(E)]/2 \times 5\%$	$(\mathbf{E}) + (\mathbf{F})$		not less than 0	= (G) / (H)
			Assets at	Projected			Projected Assets		Projected UAAL	
Fiscal Year	D	A TO CO	Beginning of	Employer	Projected Net	Projected	at End of Fiscal	Projected AAL at	at	Projected Funded
	Projected Payroll		Fiscal Year	Contributions	Benefits	Interest	Year	Year-End	Year-End	Percent
2012	·	7.19%	\$ 841,163	\$ 808,569	\$(203,683)	· ·	\$ 1,503,229	\$ 2,531,588	\$ 1,028,359	59.4%
2013	, ,	7.19%	1,503,229	840,912	(213,205)		2,221,789	2,439,697	217,907	91.1%
2014	12,163,402	0.12%	2,221,789	15,082	(220,943)	· ·	2,121,872	2,335,284	213,412	90.9%
2015	12,649,938	0.12%	2,121,872	15,082	(226,605)	100,805	2,011,154	2,219,848	208,694	90.6%
2016	13,155,936	0.11%	2,011,154	15,082	(229,894)	95,187	1,891,529	2,095,271	203,743	90.3%
2017	13,682,173	0.11%	1,891,529	15,082	(227,191)	89,274	1,768,693	1,967,237	198,544	89.9%
2018	14,229,460	0.11%	1,768,693	15,082	(223,746)	83,218	1,643,248	1,836,333	193,085	89.5%
2019	14,798,638	0.10%	1,643,248	15,082	(219,900)	77,042	1,515,471	1,702,823	187,352	89.0%
2020	15,390,584	0.10%	1,515,471	15,082	(213,403)	70,816	1,387,966	1,569,297	181,331	88.4%
2021	16,006,207	0.09%	1,387,966	15,082	(204,174)	64,671	1,263,545	1,438,552	175,007	87.8%
2022	16,646,456	0.09%	1,263,545	15,082	(194,330)	58,696	1,142,994	1,311,357	168,363	87.2%
2023	17,312,314	0.09%	1,142,994	15,082	(183,991)	52,927	1,027,011	1,188,396	161,385	86.4%
2024	18,004,806	0.08%	1,027,011	15,082	(173,204)	47,398	916,287	1,070,341	154,054	85.6%
2025	18,724,999	0.08%	916,287	15,082	(162,086)	42,139	811,423	957,776	146,353	84.7%
2026	19,473,999	0.08%	811,423	15,082	(150,727)	37,180	712,958	851,222	138,264	83.8%
2027	20,252,959	0.07%	712,958	15,082	(139,234)	32,544	621,351	751,117	129,766	82.7%
2028	, ,	0.07%	621,351	15,082	(127,710)		536,974	657,814	120,840	81.6%
2029	, , ,	0.07%	536,974	15,082	(116,258)		460,118	571,582	111,464	80.5%
2030	22,781,824		460,118	15,082	(105,021)		390,937	492,552	101,615	79.4%
2031	, , ,	0.06%	390,937	15,082	(94,075)		329,516	420,786	91,270	78.3%
2032	24,640,821		329,516	15,082	(83,544)		275,818	356,223	80,405	77.4%

# LEGISLATORS 20-YEAR BENEFIT PROJECTIONS INTERMEDIATE TREND RATES

	I. Retire	ees and Covered S	pouses		II. Total	
	( <b>A</b> )	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$
Fiscal Year		Retiree	Net		Retiree	Net
Ending 6/30	Gross Claims	Contributions	Cash Flow	GrossClaims	Contributions	Cash Flow
2012	\$ 323,312	\$ (214,901)	\$ 108,410	\$ 323,312	\$ (214,901)	\$ 108,410
2013	324,954	(210,861)	114,092	324,954	(210,861)	114,092
2014	326,291	(206,643)	119,648	326,291	(206,643)	119,648
2015	306,417	(187,753)	118,664	306,417	(187,753)	118,664
2016	277,877	(163,712)	114,165	277,877	(163,712)	114,165
2017	277,416	(160,922)	116,494	277,416	(160,922)	116,494
2018	282,246	(162,032)	120,214	282,246	(162,032)	120,214
2019	292,354	(166,912)	125,442	292,354	(166,912)	125,442
2020	275,895	(153,765)	122,129	275,895	(153,765)	122,129
2021	258,118	(140,528)	117,591	258,118	(140,528)	117,591
2022	231,503	(122,369)	109,134	231,503	(122,369)	109,134
2023	219,770	(114,624)	105,146	219,770	(114,624)	105,146
2024	201,670	(102,886)	98,784	201,670	(102,886)	98,784
2025	199,557	(101,972)	97,584	199,557	(101,972)	97,584
2026	180,376	(88,753)	91,624	180,376	(88,753)	91,624
2027	154,601	(72,464)	82,136	154,601	(72,464)	82,136
2028	130,080	(57,504)	72,576	130,080	(57,504)	72,576
2029	125,972	(56,463)	69,509	125,972	(56,463)	69,509
2030	121,979	(55,472)	66,507	121,979	(55,472)	66,507
2031	118,155	(54,538)	63,617	118,155	(54,538)	63,617
2032	113,306	(52,891)	60,415	113,306	(52,891)	60,415

# LEGISLATORS 20-YEAR FUNDING PROJECTIONS INTERMEDIATE TREND RATES

	(A)	<b>(B)</b>	(C)	<b>(D)</b>	(E)	<b>(F)</b>	( <b>G</b> )	( <b>H</b> )	<b>(I)</b>	<b>(J)</b>
						$= (C) \times 5\% +$	$= (\mathbf{C}) + (\mathbf{D}) +$		= ( <b>H</b> ) - ( <b>G</b> ),	
				$= (\mathbf{A}) \mathbf{x} (\mathbf{B})$		$[(D)+(E)]/2 \times 5\%$	$(\mathbf{E}) + (\mathbf{F})$		not less than 0	= (G) / (H)
			Assets at	Projected			Projected Assets		Projected UAAL	Projected
Fiscal Year	D	1 D.G	Beginning of	Employer	Projected Net	Projected		Projected AAL at		Funded
	Projected Payroll	i e	Fiscal Year	Contributions	Benefits	Interest	Year	Year-End	Year-End	Percent
2012	\$ 1,679,098		\$1,442,052	\$ 778,262	\$(108,410)		\$ 2,200,752	\$ 1,403,534	\$ -	100.0%
2013	1,746,262	46.35%	2,200,752	809,392	(114,092)	•	3,023,473	1,356,800	-	100.0%
2014	1,816,112	0.00%	3,023,473	-	(119,648)	148,182	3,052,007	1,302,038	-	100.0%
2015	1,888,757	0.00%	3,052,007	-	(118,664)	149,634	3,082,977	1,245,548	-	100.0%
2016	1,964,307	0.00%	3,082,977	-	(114,165)	151,295	3,120,107	1,190,844	-	100.0%
2017	2,042,879	0.00%	3,120,107	-	(116,494)	153,093	3,156,706	1,131,017	-	100.0%
2018	2,124,595	0.00%	3,156,706	-	(120,214)	154,830	3,191,322	1,064,385	-	100.0%
2019	2,209,578	0.00%	3,191,322	-	(125,442)	156,430	3,222,309	989,064	-	100.0%
2020	2,297,962	0.00%	3,222,309	-	(122,129)	158,062	3,258,242	913,375	-	100.0%
2021	2,389,880	0.00%	3,258,242	-	(117,591)	159,972	3,300,624	838,553	-	100.0%
2022	2,485,475	0.00%	3,300,624	-	(109,134)	162,303	3,353,793	768,656	-	100.0%
2023	2,584,894	0.00%	3,353,793	-	(105,146)	165,061	3,413,707	699,348	-	100.0%
2024	2,688,290	0.00%	3,413,707	-	(98,784)	168,216	3,483,139	633,096	-	100.0%
2025	2,795,822	0.00%	3,483,139	-	(97,584)	171,717	3,557,272	564,758	-	100.0%
2026	2,907,654	0.00%	3,557,272	-	(91,624)	175,573	3,641,222	499,113	-	100.0%
2027	3,023,961	0.00%	3,641,222	-	(82,136)	180,008	3,739,093	439,909	-	100.0%
2028	3,144,919	0.00%	3,739,093	-	(72,576)	185,140	3,851,658	387,540	-	100.0%
2029	3,270,716	0.00%	3,851,658	-	(69,509)	190,845	3,972,993	335,693	-	100.0%
2030	3,401,544	0.00%	3,972,993	-	(66,507)	196,987	4,103,473	284,330	-	100.0%
2031	3,537,606	0.00%	4,103,473	-	(63,617)	203,583	4,243,439	233,361	-	100.0%
2032	3,679,110	0.00%	4,243,439	-	(60,415)	210,662	4,393,685	183,123	-	100.0%

# STATE EMPLOYEES 20-YEAR BENEFIT PROJECTIONS INTERMEDIATE TREND RATES

	L Re	tirees and Covered Spous	es		II. Active Members			III. Total = $\mathbf{I}$ . + $\mathbf{II}$ .	
	<b>(A)</b>	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	( <b>A</b> )	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$
Fiscal Year Ending 6/30	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow
2012	\$ 51,001,526	\$ (10,892,571) \$	40,108,955	\$ 1,207,132	\$ (350,445)	\$ 856,687	\$ 52,208,658	\$ (11,243,016) 5	40,965,642
2013	50,662,569	(11,018,327)	39,644,243	3,648,709	(1,056,695)	2,592,014	54,311,278	(12,075,021)	42,236,257
2014	50,319,714	(11,024,535)	39,295,179	6,201,634	(1,815,398)	4,386,236	56,521,348	(12,839,933)	43,681,414
2015	49,702,015	(10,916,792)	38,785,223	9,053,080	(2,692,578)	6,360,502	58,755,095	(13,609,370)	45,145,725
2016	48,834,718	(10,788,339)	38,046,379	12,411,359	(3,697,408)	8,713,952	61,246,077	(14,485,747)	46,760,331
2017	47,594,751	(10,586,565)	37,008,185	16,050,662	(4,768,797)	11,281,865	63,645,412	(15,355,362)	48,290,050
2018	46,284,793	(10,356,693)	35,928,100	19,767,994	(5,916,027)	13,851,967	66,052,787	(16,272,720)	49,780,067
2019	44,250,200	(10,015,262)	34,234,938	24,075,217	(7,268,132)	16,807,085	68,325,416	(17,283,394)	51,042,022
2020	42,263,252	(9,651,166)	32,612,086	28,652,787	(8,727,597)	19,925,190	70,916,039	(18, 378, 763)	52,537,276
2021	40,251,816	(9,254,902)	30,996,914	32,788,073	(10,032,056)	22,756,017	73,039,889	(19,286,958)	53,752,931
2022	38,001,370	(8,825,843)	29,175,527	36,533,550	(11,211,202)	25,322,349	74,534,920	(20,037,044)	54,497,876
2023	35,992,608	(8,417,271)	27,575,337	40,197,549	(12,417,539)	27,780,010	76,190,156	(20,834,810)	55,355,347
2024	34,506,909	(8,086,179)	26,420,731	43,833,942	(13,687,533)	30,146,409	78,340,851	(21,773,712)	56,567,139
2025	33,392,731	(7,768,150)	25,624,581	46,909,833	(14,854,617)	32,055,217	80,302,564	(22,622,766)	57,679,798
2026	32,314,976	(7,438,831)	24,876,144	49,434,997	(15,849,074)	33,585,922	81,749,972	(23,287,906)	58,462,067
2027	31,398,848	(7,140,013)	24,258,835	51,916,747	(16,781,328)	35,135,419	83,315,595	(23,921,341)	59,394,254
2028	30,571,455	(6,865,149)	23,706,306	53,931,818	(17,594,823)	36,336,996	84,503,273	(24,459,972)	60,043,302
2029	29,783,202	(6,589,620)	23,193,581	55,303,353	(18,248,730)	37,054,623	85,086,554	(24,838,350)	60,248,204
2030	28,995,815	(6,342,013)	22,653,802	56,075,114	(18,789,783)	37,285,330	85,070,929	(25,131,797)	59,939,132
2031	28,102,792	(6,089,983)	22,012,810	56,428,725	(19,226,025)	37,202,700	84,531,517	(25,316,007)	59,215,510
2032	27,172,614	(5,841,775)	21,330,839	56,829,403	(19,565,858)	37,263,545	84,002,017	(25,407,633)	58,594,384

# STATE EMPLOYEES 20-YEAR FUNDING PROJECTIONS INTERMEDIATE TREND RATES

	(A)	<b>(B)</b>	(C)	<b>(D)</b>	(E)	<b>(F)</b>	( <b>G</b> )	(H)	(I)	<b>(J)</b>
						$= (C) \times 5\% +$	$= (\mathbf{C}) + (\mathbf{D}) +$		= (H) - (G),	
				$= (\mathbf{A}) \mathbf{x} (\mathbf{B})$		$[(D)+(E)]/2 \times 5\%$	$(\mathbf{E}) + (\mathbf{F})$		not less than 0	$= (\mathbf{G}) / (\mathbf{H})$
			Assets at	Projected			Projected Assets		Projected UAAL	Projected
Fiscal Year	D	ADC	Beginning of	Employer	Projected Net	Projected	at End of Fiscal	Projected AAL at	at	Funded
Ending 6/30	Projected Payroll	ARC	Fiscal Year	Contributions	Benefits	Interest	Year	<b>Year-End</b>	Year-End	Percent
2012	\$ 624,284,077	6.86%	\$11,544,955	\$47,825,888	\$(40,965,642)	· ·	\$ 19,153,954	\$ 799,231,534	\$780,077,579	2.4%
2013	649,255,440		19,153,954	44,538,923	(42,236,257)		22,471,885	811,480,955	789,009,070	2.8%
2014	675,225,658	7.80%	22,471,885	52,667,601	(43,681,414)		32,806,321	823,190,609	790,384,288	4.0%
2015	702,234,684	7.80%	32,806,321	54,774,305	(45,145,725)	1,881,031	44,315,932	834,363,647	790,047,715	5.3%
2016	730,324,071	7.67%	44,315,932	56,020,253	(46,760,331)	2,447,295	56,023,149	843,855,518	787,832,369	6.6%
2017	759,537,034	7.62%	56,023,149	57,849,684	(48,290,050)	3,040,148	68,622,931	853,204,177	784,581,246	8.0%
2018	789,918,516	7.57%	68,622,931	59,759,076	(49,780,067)	3,680,622	82,282,562	861,927,836	779,645,274	9.5%
2019	821,515,256	7.51%	82,282,562	61,717,493	(51,042,022)	4,381,015	97,339,047	870,183,881	772,844,834	11.2%
2020	854,375,866	7.46%	97,339,047	63,714,130	(52,537,276)	5,146,374	113,662,275	877,692,473	764,030,198	13.0%
2021	888,550,901	7.40%	113,662,275	65,789,262	(53,752,931)	5,984,022	131,682,628	884,749,932	753,067,304	14.9%
2022	924,092,937	7.35%	131,682,628	67,946,729	(54,497,876)	6,920,353	152,051,833	891,816,765	739,764,932	17.0%
2023	961,056,655	7.30%	152,051,833	70,185,764	(55,355,347)	7,973,352	174,855,602	898,796,899	723,941,296	19.5%
2024	999,498,921	7.26%	174,855,602	72,521,563	(56,567,139)	9,141,641	199,951,667	905,330,649	705,378,982	22.1%
2025	1,039,478,878	7.21%	199,951,667	74,969,423	(57,679,798)	10,429,824	227,671,116	911,478,979	683,807,863	25.0%
2026	1,081,058,033	7.18%	227,671,116	77,598,019	(58,462,067)	11,861,955	258,669,024	917,702,506	659,033,482	28.2%
2027	1,124,300,354	7.15%	258,669,024	80,374,469	(59,394,254)	13,457,957	293,107,195	923,917,945	630,810,750	31.7%
2028	1,169,272,368	7.12%	293,107,195	83,309,776	(60,043,302)	15,237,022	331,610,692	930,474,556	598,863,865	35.6%
2029	1,216,043,263	7.11%	331,610,692	86,443,371	(60,248,204)	17,235,414	375,041,272	937,946,497	562,905,224	40.0%
2030	1,264,684,993	7.09%	375,041,272	89,698,451	(59,939,132)	19,496,047	424,296,638	946,907,048	522,610,410	44.8%
2031	1,315,272,393	7.08%	424,296,638	93,092,216	(59,215,510)	22,061,750	480,235,094	957,899,700	477,664,606	50.1%
2032	1,367,883,289	7.07%	480,235,094	96,677,043	(58,594,384)	24,963,821	543,281,575	971,015,852	427,734,277	55.9%

# TEACHERS 20-YEAR BENEFIT PROJECTIONS INTERMEDIATE TREND RATES

	L Retir	rees and Covered S	pouses		II. Total	
	( <b>A</b> )	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$
Fiscal Year Ending 6/30	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow
2012	\$ 4,943,920	\$(3,144,134)	\$ 1,799,786	\$ 4,943,920	\$ (3,144,134)	\$ 1,799,786
2013	4,085,994	(2,601,372)	1,484,623	4,085,994	(2,601,372)	1,484,623
2014	3,524,968	(2,236,350)	1,288,619	3,524,968	(2,236,350)	1,288,619
2015	3,139,256	(1,979,532)	1,159,723	3,139,256	(1,979,532)	1,159,723
2016	2,676,491	(1,685,139)	991,353	2,676,491	(1,685,139)	991,353
2017	2,318,375	(1,458,216)	860,158	2,318,375	(1,458,216)	860,158
2018	2,060,945	(1,293,698)	767,247	2,060,945	(1,293,698)	767,247
2019	1,931,458	(1,203,872)	727,586	1,931,458	(1,203,872)	727,586
2020	1,837,011	(1,135,224)	701,787	1,837,011	(1,135,224)	701,787
2021	1,671,833	(1,027,849)	643,984	1,671,833	(1,027,849)	643,984
2022	1,547,566	(948,267)	599,299	1,547,566	(948,267)	599,299
2023	1,449,664	(884,264)	565,400	1,449,664	(884,264)	565,400
2024	1,346,516	(816,680)	529,836	1,346,516	(816,680)	529,836
2025	1,255,649	(757,461)	498,188	1,255,649	(757,461)	498,188
2026	1,192,569	(715,463)	477,105	1,192,569	(715,463)	477,105
2027	1,111,015	(663,947)	447,068	1,111,015	(663,947)	447,068
2028	1,014,933	(604,187)	410,746	1,014,933	(604,187)	410,746
2029	915,441	(544,299)	371,142	915,441	(544,299)	371,142
2030	844,153	(500,652)	343,501	844,153	(500,652)	343,501
2031	772,798	(457,363)	315,435	772,798	(457,363)	315,435
2032	701,915	(414,708)	287,207	701,915	(414,708)	287,207

# TEACHERS 6-YEAR FUNDING PROJECTIONS INTERMEDIATE TREND RATES

	(A)	<b>(B)</b>	(C)	<b>(D)</b>	(E)	<b>(F)</b>	( <b>G</b> )	(H)	(I)	<b>(J)</b>
						$= (C) \times 5\% +$	$= (\mathbf{C}) + (\mathbf{D}) +$		= (H) - (G),	
				$= (\mathbf{A}) \mathbf{x} (\mathbf{B})$		$[(D)+(E)]/2 \times 5\%$	$(\mathbf{E}) + (\mathbf{F})$		not less than 0	= (G) / (H)
			Assets at	Projected			Projected Assets		Projected UAAL	Projected
Fiscal Year	Projected		Beginning of	Employer	Projected Net	Projected	at End of Fiscal	Projected AAL at	at	Funded
Ending 6/30	Payroll	ARC	Fiscal Year	Contributions	Benefits	Interest	Year	Year-End	Year-End	Percent
2012	\$ -	\$2,600,927	\$2,040,166	\$2,600,927	\$(1,799,786)	\$ 122,037	\$ 2,963,344	\$ 10,242,758	\$ 7,279,414	28.9%
2013	-	2,600,927	2,963,344	2,600,927	(1,484,623)	176,075	4,255,723	9,233,157	4,977,434	46.1%
2014	-	1,369,722	4,255,723	1,369,722	(1,288,619)	214,814	4,551,640	8,373,981	3,822,341	54.4%
2015	-	1,369,722	4,551,640	1,369,722	(1,159,723)	232,832	4,994,471	7,603,964	2,609,493	65.7%
2016	-	1,369,722	4,994,471	1,369,722	(991,353)	259,183	5,632,023	6,968,025	1,336,002	80.8%
2017	-	1,369,722	5,632,023	1,369,722	(860,158)	294,340	6,435,927	6,434,764	-	100.0%

# STATE POLICE 20-YEAR BENEFIT PROJECTIONS INTERMEDIATE TREND RATES

	I. Reti	rees and Covered	Spouses		II. Active Member	s		<b>III.</b> Total = <b>I.</b> + <b>II.</b>	
	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$
Fiscal Year Ending 6/30	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow
2012	\$3,616,350	\$ (63,547)	\$ 3,552,803	\$ 129,585	\$ (28,663)	\$ 100,922	\$ 3,745,935	\$ (92,210)	\$ 3,653,725
2013	3,773,342	(68,538)	3,704,805	399,711	(85,151)	314,560	4,173,054	(153,689)	4,019,365
2014	3,786,881	(74,034)	3,712,847	675,440	(137,750)	537,691	4,462,321	(211,784)	4,250,538
2015	3,851,604	(78,749)	3,772,854	970,283	(190,461)	779,822	4,821,887	(269,211)	4,552,677
2016	4,010,108	(83,414)	3,926,694	1,519,715	(286,822)	1,232,893	5,529,823	(370,236)	5,159,587
2017	3,949,326	(87,849)	3,861,478	2,155,307	(391,341)	1,763,966	6,104,634	(479,190)	5,625,444
2018	3,822,116	(91,847)	3,730,269	2,709,363	(470,262)	2,239,101	6,531,479	(562,109)	5,969,370
2019	3,731,221	(95,575)	3,635,646	3,371,849	(561,735)	2,810,114	7,103,070	(657,310)	6,445,759
2020	3,651,240	(98,705)	3,552,536	4,078,005	(651,256)	3,426,749	7,729,245	(749,960)	6,979,285
2021	3,539,509	(99,210)	3,440,299	4,833,124	(740,700)	4,092,424	8,372,633	(839,910)	7,532,724
2022	3,460,571	(100,187)	3,360,384	5,550,332	(823,188)	4,727,144	9,010,903	(923,375)	8,087,528
2023	3,389,548	(100,770)	3,288,778	6,182,873	(891,944)	5,290,930	9,572,421	(992,714)	8,579,707
2024	2,986,111	(95,976)	2,890,135	6,932,044	(972,328)	5,959,715	9,918,154	(1,068,304)	8,849,850
2025	2,792,830	(90,162)	2,702,667	7,602,643	(1,039,563)	6,563,080	10,395,473	(1,129,726)	9,265,747
2026	2,477,417	(83,193)	2,394,225	8,018,993	(1,067,761)	6,951,232	10,496,410	(1,150,954)	9,345,457
2027	2,230,750	(73,705)	2,157,044	8,367,732	(1,091,244)	7,276,488	10,598,482	(1,164,950)	9,433,532
2028	1,949,087	(60,111)	1,888,977	8,744,896	(1,131,327)	7,613,569	10,693,983	(1,191,438)	9,502,546
2029	1,512,379	(44,713)	1,467,666	9,170,711	(1,170,595)	8,000,116	10,683,090	(1,215,308)	9,467,782
2030	1,221,676	(32,551)	1,189,125	9,296,739	(1,167,476)	8,129,263	10,518,414	(1,200,027)	9,318,387
2031	947,226	(22,940)	924,286	9,046,314	(1,133,702)	7,912,612	9,993,540	(1,156,642)	8,836,897
2032	644,711	(11,260)	633,451	8,743,467	(1,105,635)	7,637,833	9,388,178	(1,116,894)	8,271,284

# STATE POLICE 20-YEAR FUNDING PROJECTIONS INTERMEDIATE TREND RATES

	(A)	<b>(B)</b>	(C)	<b>(D)</b>	<b>(E)</b>	<b>(F</b> )	( <b>G</b> )	(H)	<b>(I)</b>	( <b>J</b> )
						$= (C) \times 5\% +$	$= (\mathbf{C}) + (\mathbf{D}) +$		= (H) - (G),	
				$= (\mathbf{A}) \mathbf{x} (\mathbf{B})$		$[(D)+(E)]/2 \times 5\%$	$(\mathbf{E}) + (\mathbf{F})$		not less than 0	= (G) / (H)
			Assets at	Projected			Projected Assets		Projected UAAL	
Fiscal Year	D	A TO CO	Beginning of	Employer	Projected Net	Projected	at End of Fiscal	Projected AAL at		Projected Funded
	Projected Payroll	ARC	Fiscal Year	Contributions	Benefits	Interest	Year	Year-End	Year-End	Percent
2012	\$ 18,078,880	33.18%	\$ 1,487,613	\$5,998,572	\$(3,653,725)		\$ 3,965,462	\$ 85,713,411	\$81,747,949	4.6%
2013	18,802,035	33.18%	3,965,462	6,238,515	(4,019,365)	ĺ	6,438,364	89,634,686	83,196,322	7.2%
2014	19,554,117	39.00%	6,438,364	7,626,105	(4,250,538)	406,307	10,220,239	93,696,899	83,476,660	10.9%
2015	20,336,281	39.00%	10,220,239	7,931,150	(4,552,677)	595,474	14,194,186	97,821,545	83,627,359	14.5%
2016	21,149,733	39.49%	14,194,186	8,351,590	(5,159,587)	789,509	18,175,699	101,820,442	83,644,743	17.9%
2017	21,995,722	39.55%	18,175,699	8,698,436	(5,625,444)	985,610	22,234,301	105,654,781	83,420,481	21.0%
2018	22,875,551	39.50%	22,234,301	9,035,655	(5,969,370)	1,188,372	26,488,958	109,498,158	83,009,199	24.2%
2019	23,790,573	39.41%	26,488,958	9,374,957	(6,445,759)	1,397,678	30,815,833	113,209,740	82,393,906	27.2%
2020	24,742,196	39.33%	30,815,833	9,730,099	(6,979,285)	1,609,562	35,176,209	116,733,707	81,557,497	30.1%
2021	25,731,883	39.23%	35,176,209	10,094,701	(7,532,724)	1,822,860	39,561,047	120,042,271	80,481,224	33.0%
2022	26,761,159	39.11%	39,561,047	10,465,562	(8,087,528)	2,037,503	43,976,584	123,121,375	79,144,790	35.7%
2023	27,831,605	39.03%	43,976,584	10,861,601	(8,579,707)	2,255,877	48,514,354	126,041,996	77,527,642	38.5%
2024	28,944,869	38.93%	48,514,354	11,268,630	(8,849,850)	2,486,187	53,419,322	129,025,784	75,606,462	41.4%
2025	30,102,664	38.85%	53,419,322	11,695,592	(9,265,747)	2,731,712	58,580,880	131,938,268	73,357,389	44.4%
2026	31,306,771	38.83%	58,580,880	12,157,583	(9,345,457)	2,999,347	64,392,354	135,147,150	70,754,797	47.6%
2027	32,559,042	38.79%	64,392,354	12,630,073	(9,433,532)	3,299,531	70,888,426	138,659,778	67,771,351	51.1%
2028	33,861,403	38.77%	70,888,426	13,129,674	(9,502,546)	3,635,100	78,150,654	142,528,163	64,377,509	54.8%
2029	35,215,859	38.81%	78,150,654	13,665,652	(9,467,782)	4,012,479	86,361,003	146,903,767	60,542,764	58.8%
2030	36,624,494	38.84%	86,361,003	14,223,504	(9,318,387)	4,440,678	95,706,799	151,940,761	56,233,962	63.0%
2031	38,089,473	38.87%	95,706,799	14,804,225	(8,836,897)	4,934,523	106,608,650	158,024,806	51,416,157	67.5%
2032	39,613,052	38.88%	106,608,650	15,400,569	(8,271,284)	5,508,665	119,246,600	165,298,445	46,051,846	72.1%

# BOARD OF GOVERNORS 20-YEAR BENEFIT PROJECTIONS INTERMEDIATE TREND RATES

	I. Reti	rees and Covered S <sub>1</sub>	pouses		II. Active Members			III. Total = $L + IL$	
	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$	(A)	<b>(B)</b>	$(\mathbf{C}) = (\mathbf{A}) + (\mathbf{B})$
Fiscal Year Ending 6/30	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow	Gross Claims	Retiree Contributions	Net Cash Flow
2012	\$ 2,671,841	\$ (937,872)	\$ 1,733,969	\$ 287,474	\$ (217,868)	\$ 69,606	\$ 2,959,315	\$ (1,155,740)	\$ 1,803,575
2013	2,704,703	(932,538)	1,772,165	814,068	(608,496)	205,572	3,518,771	(1,541,034)	1,977,737
2014	2,670,736	(935,368)	1,735,368	1,274,048	(933,143)	340,905	3,944,784	(1,868,511)	2,076,273
2015	2,648,329	(936,700)	1,711,629	1,734,503	(1,248,790)	485,713	4,382,831	(2,185,490)	2,197,341
2016	2,719,511	(960,951)	1,758,561	2,164,539	(1,517,902)	646,637	4,884,051	(2,478,853)	2,405,198
2017	2,651,578	(971,665)	1,679,913	2,588,990	(1,769,751)	819,239	5,240,568	(2,741,416)	2,499,152
2018	2,641,641	(979,389)	1,662,252	3,041,291	(2,046,842)	994,448	5,682,932	(3,026,232)	2,656,701
2019	2,655,252	(981,913)	1,673,339	3,465,344	(2,286,767)	1,178,576	6,120,596	(3,268,680)	2,851,916
2020	2,681,966	(982,397)	1,699,569	3,869,945	(2,497,131)	1,372,814	6,551,911	(3,479,528)	3,072,383
2021	2,682,087	(971,705)	1,710,382	4,287,222	(2,707,334)	1,579,888	6,969,309	(3,679,039)	3,290,270
2022	2,635,776	(940,421)	1,695,355	4,653,487	(2,860,242)	1,793,246	7,289,263	(3,800,662)	3,488,601
2023	2,599,336	(922,077)	1,677,259	5,070,347	(3,050,346)	2,020,001	7,669,683	(3,972,422)	3,697,260
2024	2,557,791	(906,485)	1,651,306	5,592,017	(3,330,697)	2,261,320	8,149,808	(4,237,182)	3,912,626
2025	2,502,864	(888,005)	1,614,859	6,083,241	(3,576,756)	2,506,485	8,586,105	(4,464,761)	4,121,344
2026	2,434,825	(866,602)	1,568,222	6,581,319	(3,815,880)	2,765,439	9,016,144	(4,682,482)	4,333,662
2027	2,354,020	(842,242)	1,511,778	7,144,196	(4,106,295)	3,037,900	9,498,216	(4,948,537)	4,549,679
2028	2,261,335	(814,967)	1,446,368	7,743,912	(4,431,359)	3,312,553	10,005,247	(5,246,326)	4,758,921
2029	2,157,300	(784,625)	1,372,674	8,364,487	(4,775,034)	3,589,453	10,521,787	(5,559,659)	4,962,127
2030	2,021,064	(742,342)	1,278,722	8,974,592	(5,103,685)	3,870,907	10,995,656	(5,846,027)	5,149,629
2031	1,898,699	(706,723)	1,191,976	9,616,787	(5,460,729)	4,156,058	11,515,486	(6,167,452)	5,348,034
2032	1,770,516	(668,984)	1,101,532	10,345,371	(5,889,542)	4,455,828	12,115,887	(6,558,526)	5,557,361

# BOARD OF GOVERNORS 20-YEAR FUNDING PROJECTIONS INTERMEDIATE TREND RATES

	(A)	<b>(B)</b>	(C)	<b>(D)</b>	<b>(E)</b>	<b>(F)</b>	(G)	(H)	<b>(I)</b>	<b>(J)</b>
						$= (C) \times 5\% +$	$= (\mathbf{C}) + (\mathbf{D}) +$		= (H) - (G),	
				$= (\mathbf{A}) \mathbf{x} (\mathbf{B})$		$[(D)+(E)]/2 \times 5\%$	$(\mathbf{E}) + (\mathbf{F})$		not less than 0	= (G) / (H)
			Assets at	Projected			Projected Assets		Projected UAAL	Projected
Fiscal Year	Darata ata d Darmall	ADC	Beginning of	Employer	Projected Net	Projected		Projected AAL at		Funded
	Projected Payroll	ARC	Fiscal Year	Contributions	Benefits	Interest	Year	Year-End	Year-End	Percent
2012	\$130,353,611		\$ 3,188,898	\$3,506,512	\$(1,803,575)		\$ 5,093,853	\$ 57,115,447	\$52,021,594	8.9%
2013	135,567,755	2.69%	5,093,853	3,646,773	(1,977,737)		7,059,308	60,443,471	53,384,164	11.7%
2014	140,990,466		7,059,308	5,005,162	(2,076,273)		10,414,384	63,930,821	53,516,438	16.3%
2015	146,630,084	3.55%	10,414,384	5,205,368	(2,197,341)	595,920	14,018,330	67,574,421	53,556,091	20.7%
2016	152,495,288	3.52%	14,018,330	5,372,706	(2,405,198)	775,104	17,760,943	71,255,554	53,494,611	24.9%
2017	158,595,099	3.53%	17,760,943	5,601,979	(2,499,152)	965,618	21,829,387	75,199,346	53,369,959	29.0%
2018	164,938,903	3.54%	21,829,387	5,834,048	(2,656,701)	1,170,903	26,177,638	79,293,841	53,116,203	33.0%
2019	171,536,459	3.54%	26,177,638	6,074,048	(2,851,916)	1,389,435	30,789,206	83,521,056	52,731,850	36.9%
2020	178,397,918	3.54%	30,789,206	6,323,674	(3,072,383)	1,620,743	35,661,239	87,868,648	52,207,409	40.6%
2021	185,533,834	3.55%	35,661,239	6,584,346	(3,290,270)	1,865,414	40,820,728	92,351,129	51,530,401	44.2%
2022	192,955,188	3.55%	40,820,728	6,856,063	(3,488,601)	2,125,223	46,313,414	97,002,388	50,688,974	47.7%
2023	200,673,395	3.56%	46,313,414	7,139,785	(3,697,260)	2,401,734	52,157,673	101,823,507	49,665,834	51.2%
2024	208,700,331	3.56%	52,157,673	7,435,297	(3,912,626)	2,695,950	58,376,294	106,821,622	48,445,328	54.6%
2025	217,048,344	3.57%	58,376,294	7,742,457	(4,121,344)	3,009,343	65,006,749	112,019,530	47,012,781	58.0%
2026	225,730,278	3.57%	65,006,749	8,060,843	(4,333,662)	3,343,517	72,077,447	117,429,717	45,352,270	61.4%
2027	234,759,489	3.57%	72,077,447	8,392,261	(4,549,679)	3,699,937	79,619,966	123,066,165	43,446,198	64.7%
2028	244,149,869	3.58%	79,619,966	8,737,648	(4,758,921)	4,080,467	87,679,160	128,955,876	41,276,715	68.0%
2029	253,915,863	3.58%	87,679,160	9,096,086	(4,962,127)	4,487,307	96,300,427	135,123,163	38,822,736	71.3%
2030	264,072,498	3.59%	96,300,427	9,468,453	(5,149,629)	4,922,992	105,542,243	141,605,935	36,063,692	74.5%
2031	274,635,398	3.59%	105,542,243	9,855,717	(5,348,034)	5,389,804	115,439,730	148,416,322	32,976,592	77.8%
2032	285,620,814	3.59%	115,439,730	10,258,283	(5,557,361)	5,889,510	126,030,163	155,567,938	29,537,775	81.0%

# SECTION D RETIREE PREMIUM RATE DEVELOPMENT

Rhode Island has self-insured health plans administered by United Healthcare (UHC) which are offered to Medicare and Non-Medicare retirees. In addition, a fully-insured Medicare Advantage HMO is also available to Medicare retirees. Non-Medicare retirees have both medical and drug benefits. Post-65 retirees receive only medical coverage through the State's health plan (with the exception of retirees who can remain on their active plan, who have both medical and drug coverage after age 65).

For the fully-insured Medicare Advantage HMO, initial premium rates were developed based on the rates as of July 1, 2010. These rates were used without adjustment since they reflect the demographics of the group.

For the self-insured United Healthcare Plan 65 plan, the initial premiums are calculated based on Rhode Island's own experience. Historical claim experience (for all groups) for the period from July 2008 to June 2011 was projected to the valuation period (i.e., July 1, 2011 to June 30, 2012) on an incurred claim basis and adjusted for trend, claim fluctuation and loaded for administrative expenses. A per member weighted average cost based on the projected experience was developed to be used as the initial premiums in the valuation. The starting per capita costs are the same for each group since experience is fairly uniform across each group.

Since Medicare Advantage reimbursement from Medicare are expected to be relatively flat over the next couple of years, it is expected that the premium for the Medicare Advantage plan will increase rapidly and soon match the cost of the self-insured Plan 65 plan cost. Therefore, we valued all Medicare retirees as if they were in the self-insured Plan 65.

For the self-insured Early Retiree and Value plans, the initial premiums are calculated based on each group's own experience, separately for Medicare and Non-Medicare retirees. We developed separate rates for each group to reflect the group's experience, mix of early retiree and value plans and the percentage that enroll in Medicare. The Medicare enrollment assumptions vary by group and can be found in the miscellaneous assumptions section. Historical claim experience for the period from July 2008 to June 2011 was projected to the valuation period (i.e., July 1, 2011 to June 30, 2012) on an incurred claim basis and adjusted for trend, claim fluctuation and loaded for administrative expenses. A per member weighted average cost based on the projected experience was developed to be used as the initial premiums in the valuation. Note that RIPTA claims were excluded from the development since the RIPTA group is not covered under the State's Retiree Health Care Benefits Plan. Also, note that per capita cost for Non-Medicare exceeded the rates used to charge retirees primarily due to the reflection of ERRP money. We did not reflect ERRP fund in the claims development since these funds are not anticipated to be available in the future.

Finally, to develop Medicare and Non-Medicare initial premium rates used for current retirees, we blended the Early Retiree/Value Plan rates, United Healthcare Plan 65 rates and AARP Medicare Complete rates based on the current plan elections by each group.

For future retirees, we developed rates based on the assumed election percentages found in the miscellaneous assumptions section.

Age graded and sex distinct premiums are utilized in this valuation. The premium developed by the preceding process is appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/gender specific premiums more accurately reflect the health care costs and utilization at that age.

The following are monthly illustrative premiums for self-insured medical and prescription drug benefits as of the valuation date:

Illustrative Rates as o	of J	une 30, 2	012	
		Single	Far	nily
Non-Medicare Eligible				
United "Early Retiree" Plan	\$	789.76	\$2,19	97.33
United "Value" Plan/				
Active Plan	\$	530.62	\$1,48	87.53
Medicare Eligible				
United Plan 65	\$	218.54	\$	-
United Medicare Complete/				
Secure Horizons HMO	\$	153.00	\$	-

The following are monthly one-person premiums for self-insured medical and prescription drug benefits at select ages:

	Judges	S		Legislate	ors	;	State Emplo	yees		Teache	rs		State Pol	ice	Boa	rd of Gover	mors
P	re-65 Parti	cipants	P	re-65 Parti	cipants	P	re-65 Partic	cipants	P	re-65 Parti	cipants	P	re-65 Partio	cipants	Pre	-65 Particip	ants
Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female
45	\$260.02	\$340.41	45	\$309.39	\$405.05	45	\$452.53	\$592.44	45	\$379.84	\$497.28	45	\$586.35	\$767.63	45	\$397.07	\$519.84
50	351.78	398.59	50	418.58	474.27	50	612.23	693.69	50	513.89	582.27	50	793.28	898.83	50	537.20	608.68
55	459.77	472.61	55	547.07	562.34	55	800.17	822.50	55	671.65	690.40	55	1,036.80	1,065.74	55	702.11	721.71
60	577.61	555.21	60	687.28	660.63	60	1,005.24	966.26	60	843.79	811.07	60	1,302.52	1,252.01	60	882.06	847.85

The following are monthly one-person premiums for self-insured and fully-insured medical and prescription drug benefits at select ages:

Medic	care Advan	tage HMO	United Healthcare Plan 65				
N	Aedicare-E	ligible	Medicare-Eligible				
Age	Male	Female	Age	Male	Female		
65	\$160.30	\$147.61	65	\$170.47	\$156.98		
70	184.90	166.27	70	196.64	176.82		
75	205.27	182.18	75	218.30	193.74		

These rates are used in determining the actuarial cost of the plan. The rates that are charged to the retirees are set separately by the State on a pooled basis.

The undersigned is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown on the previous page.

John R. Mallows, FSA, MAAA

# SECTION E SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

This is a brief summary of the Rhode Island State Employees' and Electing Teachers OPEB provisions in effect as of June 30, 2011. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate Plan Sponsor Statute and/or employee contract will prevail.

### SUMMARY OF PLAN PROVISIONS AS OF JUNE 30, 2011 RETIREE HEALTH CARE BENEFITS PLAN

#### PLAN PARTICIPANTS

Members of the Employees' Retirement System of Rhode Island (ERSRI), including State Employees, Legislators, and Certified Public School Teachers, with the exception of municipal employees are eligible to receive some form of State sponsored retiree health care benefits, provided the member began receiving a pension upon termination of State employment and meets the benefit eligibility requirements set forth below. In addition, State Judges and Legislators may purchase the active employee health care benefits at the early retiree rate or the Medicare supplemental plans for their lifetime. State Police Officers receive the active health care benefits at the same co-share they were paying as of their retirement date up to age 65.

The State provides two types of health care benefits. The Tier I subsidy provides that the State will pay the portion of the cost of post-retirement health care for the retiree and any dependents above the active group rate. The retiree pays a portion of the active monthly rate, and the State pays the difference between the active group rate and the early retiree rate. This subsidy is not based upon years of service and ends at age 65. In addition to the Tier I benefits, the state pays a portion of the cost of post-retirement health care above the Tier I costs for the retiree based upon the age and service of the retiree, which is referred to as the Tier II benefits.

#### Benefits Prior to 2008-H7204 Article 4

#### BENEFIT ELIGIBILITY – SERVICE RETIREMENT

Members of ERSRI are eligible to receive a portion of their post-retirement health insurance costs paid by the State if they retire with 10 or more years of contributing service. Eligibility conditions for retirement are:

**State Police:** Members hired before 7/1/07 are eligible for retirement after

completion of 20 years of service. (The Superintendent of State Police may retire on or after age 60 if he has credit for 10 years of service.) Members hired after 7/1/07 are eligible to retire after 25

years of service.

**Employee Retirement System:** 

Age 60 with 10 years of service or any age with 28 years of service for those employees with ten or more years of contributing service prior to 7/1/05 and eligible to retire as of 9/30/09. If vested (10 years of contributing service as of 7/1/05), but ineligible to retire as of 9/30/09, must be age 62. For those employees with less than 10 years of service prior to 7/1/05, the employee must be age 59 with at least 29 years of service, age 65 with ten years of service, or age 62 with 29 years of service depending on vesting schedule and hire date.

Additional eligibility conditions apply to the following groups:

**RN members:** Age 50 with 25 years of service if eligible to retire as of 9/30/09

Age 55 with 25 years of service if eligible on or after 10/1/09

**Correctional Officers:** Age 50 with 20 years of service if eligible to retire as of 9/30/09

Age 55 with 25 years of service if eligible on or after 10/1/09

**Legislators:** Age 55 with 8 years of service or any age with 20 years of service

## SUMMARY OF PLAN PROVISIONS AS OF JUNE 30, 2011 RETIREE HEALTH CARE BENEFITS PLAN (CONTINUED)

#### Benefits Prior to 2008-H7204 Article 4

#### BENEFIT AMOUNT - SERVICE RETIREMENT - CONTINUED

All Other Members Retiring after 7/1/89: In addition to the Tier 1 benefits, the state pays a portion of the cost of post-retirement health care above the Tier 1 costs for the retiree based on the age and service of the retiree (see chart below). This additional benefit is referred to as the Tier 2 Benefit. Spouses are not eligible for the Tier 2 benefit. All Tier 1 benefits end at age 65, however, Tier 2 benefits continue for retirees only at age 65.

Note:

Although Article 7 Chapter 117 of the Public Laws of 2005 amended the retirement system statute to institute a minimum retirement age for all non-vested employees, these changes were not reflected in RIGL Section 36-12-4, which relates to post employment health benefits. Because this is a potential liability, the chart below has not been modified.

Retiree Age Below Age 60						
Service	Amount of Cost Paid by State					
Under 28	0%					
28-34	90%					
35+	100%					

Retiree Age from Age 60 to Age 65						
Service	Amount of Cost Paid by State					
0 - 10	0%					
10 - 15	50%					
16 - 22	70%					
23 – 27	80%					
28+	100%					

Retiree Age Greater than Age 65							
Service	Amount of Cost Paid by State						
10 - 15	50%						
16 – 19	70%						
20 – 27	90%						
28+	100%						

## SUMMARY OF PLAN PROVISIONS AS OF JUNE 30, 2011 RETIREE HEALTH CARE BENEFITS PLAN (CONTINUED)

#### Benefits Prior to 2008-H7204 Article 4

#### **DEFERRED RETIREMENT**

Members who terminate active employment with the State may be entitled to deferred coverage for post-retirement health care benefits if they have 10 years of service at the time of their termination and they leave their pension contributions on deposit with ERSRI.

The benefit commencement is coincident with the normal retirement eligibility conditions described above. The amount of the benefit is based on age and service as described above.

Effective June 30, 2008, deferred coverage is not available for current and future members who terminate active employment but are not eligible to retire immediately. Employee must immediately retire for eligibility for retiree health care through the State.

#### **DISABLED RETIREMENT**

All members (other than Teachers and State Police) who retire with a disability benefit are eligible to purchase the individual or family active package (at full active cost) prior to age 60. Upon reaching age 60 (with 10 years of contributing service), they may continue with the active package, and will also get the Tier 2 benefit (subsidy based on age and years of service).

Teachers who retire on a disability pension are not entitled to the active package, dental coverage, or vision coverage. Teachers qualify only for the Early Retiree Plan and are not eligible for Tier 2 benefits.

State Police troopers continue to pay the same percent co-share they paid while employed toward the Active package (health, dental, and vision) until becoming eligible for Medicare. If a trooper never becomes eligible for Medicare then the trooper continues with the Active package at the same subsidy level. Upon being eligible for Medicare, they revert to a Post-65 health plan through the retirement system and pay the entire cost.

#### **SURVIVORS BENEFITS**

All Members except State Police: Survivors of retirees or active members who die in service are

entitled to post-retirement health care benefits if and only if they are entitled to survivor pension benefits from ERSRI. The amount paid by the State is the amount above the group rate for an active member. Pre-65 beneficiaries receive a Tier 1 benefit,

while Post-65 beneficiaries pay the entire premium.

**State Police:** Survivors of retirees or active members continue active coverage.

State continues to pay same subsidy for active health care benefits until survivor becomes Medicare eligible. Upon eligibility for Medicare, survivor may purchase Post-65 health

care coverage through the State.

## SUMMARY OF PLAN PROVISIONS AS OF JUNE 30, 2011 RETIREE HEALTH CARE BENEFITS PLAN (CONTINUED)

#### Benefits Prior to 2008-H7204 Article 4

#### MEDICARE – ELIGIBLE

**Disabled:** Members may continue with the active package, but the State

pays only a certain percentage of the MediGap amount based on

years of service and vesting.

**Non-Disabled**: Tier 1 benefits are not paid by the State. For retired members,

other than Teachers and State Police, State pays a percentage of a Post-65 health plan depending on member service. Dependents

pay 100% of health care benefits.

**State Police:** If the retiree and/or spouse are Medicare eligible, they pay the

entire amount of the Post-65 plan. There is no state subsidy for

retirees that are Medicare eligible.

If the retiree is not Medicare eligible, the retiree pays the same percent co-share for the active plan benefit as they paid while employed. (Note: The majority of State Police are Medicare

eligible).

This is a brief summary of the Rhode Island State Employees' and Electing Teachers OPEB provisions in effect as of June 30, 2011. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate Plan Sponsor Ordinance and/or employee contract will prevail.

# SUMMARY OF PLAN PROVISIONS RETIREE HEALTH CARE BENEFITS PLAN (CONTINUED)

#### State Employees (2008-H7204 Article 4)

#### **Early Retirees**

- The State offers a self-insured health plan administered by United Healthcare to early retirees (under age 65) and their spouses with both medical and drug benefits.
- For all employees retiring after Sept. 30, 2008, the Tier 1 subsidy ends. All costs and cost sharing is based on the actual cost of the plan, not the lower active employee rate. The State will also offer an alternate plan with reduced benefits at the same rate paid by active employees.
- <u>Employees retiring after Sept. 30, 2008</u> are required to have at least 20 years of service and be age 59 to be eligible for a State subsidy. All eligible would pay a 20% cost share on the actual cost of the plan.

Creditable		State-	Retiree-
Service	Age	Paid	Paid
< 20 years	any	0%	100%
20+	< 59	0%	100%
20+	59+	80%	20%

- Those retiring with less than 20 years of service have to pay the full price of the plan chosen. Those retiring before age 59 with at least 20 years of service receive the 80% subsidy at age 59.
- As of May 1, 2008, Article 4 amends the Tier 2 subsidy table to read "age at retirement" to clarify that the State subsidy for those with 28 to 35 years of service does not increase from 90% to 100% when the retiree turns 60. This applies to all current retirees and those retiring before October 1, 2008.
- At age 65, State retirees must purchase Medicare Part B (deducted from their Social Security checks) and enroll in a Medicare Supplemental plan. There are 2 choices for State-sponsored plans: a State self-insured plan with no pharmacy benefit or a fully-insured Medicare HMO plan which includes Medicare Part D for pharmacy coverage.
- There is no post-65 Tier 1 subsidy. Retiree share is based on actual plan cost. Currently, that is \$2,538.60 for Plan 65 and \$2,100.00 effective Jan. 1, 2012 for the HMO choice.

## SUMMARY OF PLAN PROVISIONS AS AMENDED EFFECTIVE JUNE 30, 2008 RETIREE HEALTH CARE BENEFITS PLAN (CONTINUED)

#### **Teachers (2008-H7204 Article 4)**

- Most retired teachers receive health benefits from their municipality.
- For those that do not, the State offers its self-insured health plan administered by United Healthcare to early retirees and their spouses with both medical and drug benefits. Post-65 retirees who are eligible for Medicare may select from a State's self-insured plan or a fully-insured Medicare HMO plan. Teachers not eligible for Medicare continue the same coverage as early retirees.
- For all teachers retiring after Sept. 30, 2008, Tier 1 subsidy ends. All costs will be based on the actual cost of the plan not the lower active employee rate. There is no other cost sharing by the State. The State will also offer an alternate plan with reduced benefits at the same rate paid by active employees.
- There is no post-65 Tier 1 subsidy. Retiree share is based on actual plan cost. Currently, that is \$2,538.60 for Plan 65 and \$2,100.00 effective Jan. 1, 2012 for the HMO choice.

## SUMMARY OF PLAN PROVISIONS AS AMENDED EFFECTIVE JUNE 30, 2008 RETIREE HEALTH CARE BENEFITS PLAN (CONTINUED)

#### **Disabled (2008-H7204 Article 4)**

- All State employee members who retire with a disability benefit may purchase the active
  employee plan at the active rate until age 59. From ages 59 to 65, they are only eligible to
  purchase the early retiree plan at its actual cost or a Medicare supplemental plan, both with State
  cost-sharing if they meet eligibility requirements.
- Current disability retirees not 65 as of September 30, 2008 and future retirees must transition to a State sponsored Medicare supplement plan at age 65 if eligible to do so.
- All cost sharing language for disability retirees now appears separately from the statutes for regular retirees. This includes provisions to "grandfather" certain current retirees into former cost sharing terms.
- Those who retired prior to September 30, 2008 and are at least 60 as of that date are subject to the former cost sharing provisions, which are restated in a new section of law, until they reach age 65. The cost sharing and the plan to which it applies depends on age as follows:
  - o <u>From ages 60 to 65</u>, the retiree may get the active plan at the active rate, and State cost sharing on that rate is as follows.

Years of Service	State's Share	Employee's Share
10-15	50%	50%
16-22	70%	30%
23-27	80%	20%
28+	100%	0%

O <u>Upon turning age 65 on or after October 1, 2008</u>, the retiree must transition to a State sponsored Medicare supplement plan at age 65 if eligible to do so. Cost sharing on that plan is as follows:

Years of Service	State's Share	Employee's Share
0-10	0%	100%
10-20	50%	50%
20+	80%	20%

Those at least aged 65 as of Sept. 30, 2008 are "grandfathered" into the former terms. This means they may keep the active plan at the active rate, but the State cost sharing is based on the cost of the Medicare plan. The employee pays a share of that plan's cost, shown in the table below, and any excess cost if she/he remains on the active employee plan.

Years of Service	State's Share	Employee's Share
10-15	50%	50%
16-19	70%	30%
20-27	90%	10%
28+	100%	0%

• <u>Future retirees and those who have not turned 60 as of September 30, 2008</u> would be subject to cost sharing and plans more in line with other Article 4 changes. The percentages apply to the early retiree plan at its actual cost for those aged 59-65 and the Medicare Supplemental plans after that.

Years of Service	State's Share	Employee's Share
0-10	0%	100%
10-20	50%	50%
20+	80%	20%

# SUMMARY OF PLAN PROVISIONS AS AMENDED EFFECTIVE JUNE 30, 2008 RETIREE HEALTH CARE BENEFITS PLAN (CONCLUDED)

#### State Police (2008-H7204 Article 4)

- No governing statutes provided through collective bargaining agreement eff. May 2006 through April 2009.
- Article 4 has no impact other than to require that the benefits be funded on an actuarial basis rather than pay-as-you-go.

#### **Judges (2008-H7204 Article 4)**

- *No governing statutes provided as a matter of past practice.*
- Article 4 has no impact on this population. The retired employees' payments for this coverage and the state's expenses will be handled through the OPEB trust fund.

#### Legislators (2008-H7204 Article 4)

 Article 4 has no impact on this population. The retired employees' payments for this coverage and the state's expenses will be handled through the OPEB trust fund

#### **2011 Legislative Changes**

- Retired Judges and Legislators are required to enroll in Medicare Part A and Part B upon eligibility and may only purchase Medicare supplemental plans at that time.
- State Police Officers must pay a portion of the Early Retiree rate based on the same active coshare they were paying at retirement.

This is a brief summary of the Rhode Island State Employees' and Electing Teachers OPEB provisions in effect as of June 30, 2011. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate Plan Sponsor Statute and/or employee contract will prevail.

# RETIREE HEALTH CARE INSURANCE BENEFITS AS OF JUNE 30, 2011 ALTERNATE RETIREMENT PLAN EMPLOYEES BOARD OF GOVERNORS FOR HIGHER EDUCATION

For the fiscal year beginning July 1, 2008, the pre-65 retiree health care coverage will be eliminated. In addition, the post-65 retiree health insurance contributions will increase in accordance with the following schedule.

Post-65 Retiree Health Insurance Premium		
Contributions		
1/1/2008	0.50%	of base salary
7/1/2008	0.75%	of base salary
7/1/2009	0.90%	of base salary

Non-union, non-classified employees who currently participate in the retiree health insurance program will be offered a one-time option to either remain in or withdraw from the retiree health insurance option prior to June 30, 2008.

AAUP members are no longer eligible to participate in the retiree health care program.

### RETIREE HEALTH CARE INSURANCE BENEFITS AS OF JUNE 30, 2011

# ALTERNATE RETIREMENT PLAN EMPLOYEES BOARD OF GOVERNORS FOR HIGHER EDUCATION

#### **SUMMARY**

The Board of Governors (BOG) has established health care insurance coverage for employees participating in the BOG Alternate Retirement Plan (ARP) upon retirement. The plan is identical to that which is currently afforded members of the Employees' Retirement System of Rhode Island (ERSRI) in regards to the formula based on years of service and age at retirement. All current and future covered employees will be subject to a mandatory payroll deduction of 0.25% of salary. Contributions of members who are not vested are not refunded upon termination. This began upon ratification of the plan by the individual unions.

#### **ELIGIBILITY**

This health benefit applies to all employees who either currently participate in or will be eligible to participate in the BOG ARP as defined in RIGL 16-17.1-1 and 2. This includes employees with a primary retirement plan funded through TIAA-CREF, MetLife, or AIG/VALIC.

### BENEFIT ELIGIBILITY

Members become eligible for retiree medical benefits at age 65 or older with 10 or more years of service or at any age with 28 or more years of service, per the chart on the following page.

### BENEFIT AMOUNT

The BOG pays a portion of the cost of post-retirement health care above the Tier I costs for the retiree based upon the age and service of the retiree. This is a lifetime benefit.

### RETIREE HEALTH CARE INSURANCE BENEFITS AS OF JUNE 30, 2011

# ALTERNATE RETIREMENT PLAN EMPLOYEES BOARD OF GOVERNORS FOR HIGHER EDUCATION

#### **BENEFIT AMOUNT**

Eligible employees retiring *on or after June 21, 1998*, from active service with the BOG shall receive a cost sharing formula as follows:

POST-65 MEDICARE SUPPLEMENTAL COVERAGE

Years of Service	Employer's Share	Employee's Share
10-15	50%	50%
16-19	70%	30%
20-27	90%	10%
28+	100%	0%

Eligible employees retiring *before June 21, 1998*, from active service with the BOG shall receive a Tier 1 benefit and a cost sharing formula applicable to the active rate and post-65 rate as follows:

PRE-65 MEDICARE COVERAGE

Years of Service	Age	Employer's Share	Employee's Share
10-15	60	50%	50%
16-22	60	70%	30%
23-27	60	80%	20%
28+	Any	90%	10%
28+	60	100%	0%
35+	Any	100%	0%

POST-65 MEDICARE SUPPLEMENTAL COVERAGE

Years of Service	Employer's Share	Employee's Share
10-15	50%	50%
16-19	70%	30%
20-27	90%	10%
28+	100%	0%

RETIREE HEALTH CARE INSURANCE BENEFITS

**AS OF JUNE 30, 2011** 

ALTERNATE RETIREMENT PLAN EMPLOYEES BOARD OF GOVERNORS FOR HIGHER EDUCATION

**DEFERRED RETIREMENT** 

Members who retire from active employment with the State may be entitled to deferred coverage for

post-retirement health care benefits if they have 10 years of service at the time of their retirement.

The benefit commencement is coincident with the normal retirement eligibility conditions described on

the previous page. The amount of the benefit is based on age and service as described on the previous

page.

**DISABLED RETIREMENT** 

All members who retire with a disability benefit are eligible to purchase the individual or family active

package (at full active cost) prior to age 65. Upon reaching age 65 (with 10 years of service), they may

continue with the active package, with a subsidy based on age and years of service. Retirees must

enroll in Medicare when eligible.

**SURVIVORS BENEFITS** 

Survivors of retirees are entitled to post-retirement health care benefits.

MEDICARE – ELIGIBLE RETIREES

**Disabled:** 

Members may continue with the active package.

Non-Disabled:

The BOG pays a percentage of supplemental Medicare costs depending on member

service. Dependents pay 100% of health care benefits.

This is a brief summary of the State of Rhode Island Board of Governors Other Postemployment Benefits provisions. In the event that any description contained herein differs from the actual

eligibility or benefit, the appropriate Plan Sponsor Ordinance and/or employee contract will prevail.

# SUMMARY OF KEY MEDICAL AND PRESCRIPTION DRUG BENEFITS FOR EARLY RETIREES

## **Early Retirees Option #1: United Health Care PPO**

Benefit	In-Network	Out-of-Network
Individual Deductible	None	None
Out-of-Pocket Maximum	None	\$3,000 per person/year; \$9,000 per family/year
Preventive Services	Covered in Full	20% co-pay
Doctor's Charges (Office) Specialist Primary	\$20 co-pay \$10 co-pay	20% co-pay 20% co-pay
<b>Emergency Care</b>	\$100 co-pay	\$100 co-pay
Hospital Services: Unlimited days at a general hospital; 45 days per calendar year at specialty hospitals or in a general hospital for specialty services	Covered in Full	20% co-pay
Diagnostic X-Ray and Laboratory	Covered in Full	20% co-pay
Prescription Drugs	\$5/\$20/\$40	\$5/\$20/\$40
Dental Services – Accident Only	Covered in Full	Covered in full
Durable Medical Equipment Inpatient	Covered in Full	20% co-pay
Durable Medical Equipment Outpatient	20% co-pay	20% co-pay
Hospice Care	Covered in Full	20% co-pay
House Calls for PCP	\$10 per visit	20% co-pay
Infertility Services	20% co-pay	20% co-pay
Nutritional Services – 6 visits per year	\$20 per visit	20% co-pay
Skilled Care in a Nursing Facility	Covered in Full	20% co-pay
<b>Urgent Care Services</b>	\$35 Per visit	20% co-pay

Out of Network Services subject to a 20% co-pay: Member is responsible for 80% of eligible expenses, plus any difference between eligible charges and billed charges.

# SUMMARY OF KEY MEDICAL AND PRESCRIPTION DRUG BENEFITS FOR EARLY RETIREES

## **Early Retirees Option #2: United Health Care Value Plan**

Benefit	In-Network	Out-of-Network
Individual Deductible	\$2,000 individual, \$4,000 family	\$5,000 individual, \$10,000 family
Out-of-Pocket Maximum	\$4,000 per person/year; \$8,000 per family/year	\$10,000 per person/year; \$20,000 per family/year
Preventive Services	Covered in Full	50% co-pay
Doctor's Charges (Office) Primary	\$35 co-pay	50% co-pay
Emergency Care	\$150 co-pay	\$150 co-pay
Hospital Services	30% co-pay	50% co-pay
Diagnostic X-Ray and Laboratory	Covered in Full	50% co-pay
Prescription Drugs	\$10/\$30/\$50	\$10/\$30/\$50
Dental Services – Accident Only	30% co-pay	30% co-pay
Durable Medical Equipment	30% co-pay	50% co-pay
Hospice Care	30% co-pay	50% co-pay
House Calls for PCP	30% co-pay	50% co-pay
Infertility Services	20% co-pay	20% co-pay
Skilled Care in a Nursing Facility	30% co-pay	50% co-pay
Urgent Care Services	\$50 Per visit	50% co-pay

Out of Network Services subject to a 50% co-pay: Member is responsible for 80% of eligible expenses, plus any difference between eligible charges and billed charges.

# SUMMARY OF KEY MEDICAL AND PRESCRIPTION DRUG BENEFITS FOR POST-65 RETIREES OPTION 1

# Post-65 Retirees Option #1: United Health Care Plan 65 (Medicare Primary Plan)

Benefit	Coverage
Individual Deductible	No Annual Deductible
Out-of-Pocket Maximum	None
Preventive Services	Medicare Standard
Doctor's Charges (Office)	Covered in Full
Hospital Services	Days 1-60: Covered in Full Days 61-90 Covered in Full 60 lifetime reserve days Covered in Full 365 additional days: 10% co-pay after lifetime reserve days exhausted
Skilled Nursing Facility	Days 1-20: Covered in Full Days 21-100: Covered in Full Days 101 + Retiree pays 100%
Home Health Care	Covered in Full
Diagnostic X-Ray and Laboratory	Covered in Full
Ambulance (emergency only) Durable Medical Equipment	Covered in Full
Prescription Drugs	No Coverage
Blood	First 3 Pints Covered in Full
<b>Emergency Room Care</b>	Covered in Full
Eye Examinations	No Coverage
Non-Routine Vision Care	Covered in Full
Hospice Care	Limited co-pay for outpatient drugs and respite care

Chiropractic services – Co-pay is \$0 for "manual manipulation of the spine for a subluxation" only. The plan does not cover routine care.

# SUMMARY OF KEY MEDICAL AND PRESCRIPTION DRUG BENEFITS FOR POST-65 RETIREES OPTION 2

Post-65 Retirees Option #2: United Health Care Medicare Complete

Benefit	Coverage
Individual Deductible	No Annual Deductible
Out-of-Pocket Maximum	\$400
Annual Physical	\$10 Co-pay (1 per year)
Doctor's Charges (Office)	\$10 General/\$20 Specialist
Hospital Services	\$100 Co-pay per admission
Skilled Nursing Facility	Days 1-29: Covered in Full Days 30-100: Covered in Full Days 101 + Retiree pays 100%
Home Health Care	Covered in Full
Diagnostic X-Ray and Laboratory	Covered in Full
Durable Medical Equipment	Covered in Full
Chiropractic & Podiatry Services	\$20 Co-pay
Ambulance	\$50 Co-pay
Emergency Care/Urgent Care	\$35 Co-pay/\$20 Co-pay
Prescription Drugs: Part D Plan No initial Rx Deductible; Standard Part D Retail Retail: 30-day Supply:	
Generic Formulary Drugs Tier 1	\$ 3 Co-pay
Name-Brand Formulary Drugs Tier 2	\$28 Co-pay
Non-Formulary Drugs Tier 3 Specialty Tier	\$58 Co-pay 25% Co-pay
90-day Supply:	25% Co-pay
Tier 1	\$6 Co-pay
Tier 2	\$56 Co-pay
Tier 3	\$116 Co-pay
Specialty Tier	25% Co-pay
Mail Order: Limited to a 90-day Supply:	0.6
Tier 1	\$6 Co-pay
Tier 2	\$56 Co-pay
Tier 3 Specialty Tier	\$116 Co-pay 25% Co-pay

Out of network copayment: in addition to paying the copayments listed in the chart, the retiree is required to pay the difference between what the insurer would pay for a prescription filled at in-network pharmacy and what the out-of-network pharmacy charges for the prescription.

# ACTIVE JUDGES MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

		Ŋ	ears of Se	rvice to V				
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Total No.
20-24								
25-29								
30-34								
35-39								
40-44	1							1
45-49	2	3	1					6
50-54	2		3	2	2	1	1	11
55-59	1	2	8		2	1		14
60-64	1	2	1	2	6	2		14
65 & Over	1	2	3	5	2	2	3	18
Totals	8	9	16	9	12	6	4	64

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 59.8 years **Service:** 15.6 years

**Annual Pay:** \$168,957

## ACTIVE LEGISLATURE MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

		Years of Service to Valuation Date								
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Total No.		
20-24	2							2		
25-29	1							1		
30-34	2		1					3		
35-39	5	2						7		
40-44	11	5	1					17		
45-49	12	2	1	2	1			18		
50-54	9	1	2	9	3			24		
55-59	7		6	2	1			16		
60-64	4	1		2	1	1	1	10		
65 & Over	6	1	2	4	1			14		
Totals	59	12	13	19	7	1	1	112		

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 51.0 years **Service:** 8.1 years

**Annual Pay:** \$14,415

# ACTIVE STATE EMPLOYEE MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

	Years of Service to Valuation Date								
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Total No.	
15-19	1							1	
20-24	127	6						133	
25-29	415	124						539	
30-34	321	298	84					703	
35-39	266	333	272	27	1			899	
40-44	300	291	368	182	235			1,376	
45-49	338	310	307	204	547	156	7	1,869	
50-54	299	327	346	210	478	353	142	2,155	
55-59	236	289	327	199	393	212	239	1,895	
60-64	105	191	199	150	256	170	152	1,223	
65 & Over	38	63	94	58	163	81	78	575	
Totals	2,446	2,232	1,997	1,030	2,073	972	618	11,368	

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 48.8 years **Service:** 13.9 years

**Annual Pay:** \$52,804

## ACTIVE TEACHERS MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

Active Teachers were excluded from the valuation. The state no longer provides the Tier 1 subsidy to future retirees. Certain school districts did not participate in Medicare prior to 1986. Teachers hired in those districts prior to that date may generate a post-65 implicit subsidy for the State, however many of those Teachers may get Medicare coverage from working 40 quarters in another covered position or through a covered spouse.

# ACTIVE STATE POLICE MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

		Year	s of Servi	ice to Val	uation Da	ıte		
Attained								Total
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24	3							3
25-29	18	4						22
30-34	9	9	2					20
35-39	2	13	12	1				28
40-44		8	21	24	6			59
45-49			13	26	22			61
50-54			3	8	9			20
55-59				1				1
60-64								
65 & Over								
Totals	32	34	51	60	37			214

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 41.0 years **Service:** 13.1 years

**Annual Pay:** \$81,231

## ACTIVE BOARD OF GOVERNORS MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

		Years of Service to Valuation Date								
Attained								Total		
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.		
20-24	12							12		
25-29	90	6						96		
30-34	111	55	3					169		
35-39	94	53	22	1				170		
40-44	94	54	39	14				201		
45-49	84	62	58	23	16	4		247		
50-54	76	72	46	30	32	13	7	276		
55-59	77	53	48	49	51	39	36	353		
60-64	35	43	40	31	32	37	78	296		
65 & Over	16	18	20	10	25	20	106	215		
Totals	689	416	276	158	156	113	227	2,035		

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 50.2 years **Service:** 12.4 years

**Annual Pay:** \$61,592

## RETIRED AND DEFERRED MEMBERS AS OF JUNE 30, 2011 BY ATTAINED AGE

### **RETIRED MEMBERS\***

Attained	Number of Retirees											
Age	Judges	Legislature	State Employees	Teachers	State Police	BoG	Total					
Under 50	0	4	49	3	55	3	114					
50-54	0	4	345	8	58	1	416					
55-59	3	4	917	50	64	21	1,059					
60-64	3	15	1,635	302	74	82	2,111					
65 & Over	64	89	6,394	1,448	101	702	8,798					
Totals	70	116	9,340	1,811	352	809	12,498					

<sup>\*</sup> Includes both retirees and beneficiaries participating in the retiree health care plan.

#### **DEFERRED MEMBERS**

Terminated employees are not included in the valuation.

## SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

#### VALUATION METHOD

Actuarial Cost Method. Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an Individual Entry-Age Actuarial Cost Method having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains (losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of Unfunded Actuarial Accrued Liabilities. Unfunded Actuarial Accrued Liabilities (UAAL) were amortized by a level (principal and interest combined) percent of payroll contribution for State Employees, State Police and Board of Governors, and by a level dollar amount for Judges, Legislators and Teachers. The UAAL were determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment reflects payments expected to be made between the valuation date and the fiscal year for which the contributions in this report have been calculated.

By statute, the UAAL is being amortized over the remainder of a closed 30-year period (or shorter) from June 30, 2006. The UAAL amortization payment is the amount required to fully amortize the UAAL over a 4-year level dollar amortization period for Teachers, a 25-year period as a level percent of payroll for State Employees, State Police and Board of Governors, and a 25-year period as a level dollar amount for Judges and Legislators beginning on the valuation date.

#### **ACTUARIAL ASSUMPTIONS**

Rates of Investment. 5.00% per year, compounded annually, net of expenses.

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which future contributions will be based.

SALARY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER

Service	State	Employees, B	oG		Legislators			State Police			
at Beginning	Merit &	Base	Increase	Merit &	Base	Increase	Merit &	Base	Increase		
of Year	Longevity	(Economic)	Next Year	Longevity	(Economic)	Next Year	Longevity	(Economic)	Next Year		
0	3.00 %	4.00 %	7.00 %	4.50 %	4.00 %	8.50 %	4.25 %	4.00 %	8.25 %		
1	3.00	4.00	7.00	4.00	4.00	8.00	4.00	4.00	8.00		
2	3.00	4.00	7.00	3.50	4.00	7.50	4.00	4.00	8.00		
3	2.75	4.00	6.75	3.00	4.00	7.00	8.00	4.00	12.00		
4	2.75	4.00	6.75	2.75	4.00	6.75	5.00	4.00	9.00		
5	2.75	4.00	6.75	2.50	4.00	6.50	3.25	4.00	7.25		
6	1.50	4.00	5.50	2.00	4.00	6.00	1.25	4.00	5.25		
7	1.50	4.00	5.50	1.50	4.00	5.50	1.25	4.00	5.25		
8	1.25	4.00	5.25	1.25	4.00	5.25	1.00	4.00	5.00		
9	1.25	4.00	5.25	1.00	4.00	5.00	1.00	4.00	5.00		
10	1.25	4.00	5.25	0.75	4.00	4.75	0.75	4.00	4.75		
11	1.25	4.00	5.25	0.50	4.00	4.50	0.75	4.00	4.75		
12	1.25	4.00	5.25	0.50	4.00	4.50	0.75	4.00	4.75		
13	1.00	4.00	5.00	0.25	4.00	4.25	0.75	4.00	4.75		
14	1.00	4.00	5.00	0.25	4.00	4.25	0.75	4.00	4.75		
15	1.00	4.00	5.00				0.50	4.00	4.50		
16	0.75	4.00	4.75				0.50	4.00	4.50		
17	0.75	4.00	4.75				0.50	4.00	4.50		
18	0.50	4.00	4.50				0.50	4.00	4.50		
19	0.50	4.00	4.50				0.50	4.00	4.50		
20	0.50	4.00	4.50				0.25	4.00	4.25		
21	0.00	4.00	4.00				0.25	4.00	4.25		
22							0.25	4.00	4.25		
23							0.25	4.00	4.25		
24							0.25	4.00	4.25		
25 or more							0.00	4.00	4.00		
Ref	428			252			260				

Judges were assumed to have 4.0% salary increases.

The number of active members is assumed to remain constant in the future.

The payroll growth rate for amortizing the Unfunded Actuarial Accrued Liabilities was assumed to be 4.0% for all State Employee, State Police and the Board of Governors members.

**Post-Retirement Mortality Rates.** The mortality tables used to project the post-termination mortality experience of plan members are described below.

**Healthy Male Teachers :** 97% of rates in a GRS table based on male teacher experience, projected with Scale AA from 2000.

**Healthy Female Teachers :** 92% of rates in a GRS table based on female teacher experience, projected with Scale AA from 2000.

**Healthy Male Non-Teachers:** 115% of RP-2000 Combined Health for Males with White Collar adjustments, projected with Scale AA from 2000.

**Healthy Female Non-Teachers :** 95% of RP-2000 Combined Health for Females with White Collar adjustments, projected with Scale AA from 2000.

Sample rates for Non-Disabled Members prior to the Scale AA projection, as well as Scale AA are shown below:

Sample	Healthy	Healthy	Healthy	Healthy		
Attained	Males	<b>Females</b>	Males	<b>Females</b>	Scale AA	Scale AA
Ages	(Non-Teachers)	(Non-Teachers)	(Teachers)	(Teachers)	Males	Females
25	0.04 %	0.02 %	0.07 %	0.03 %	1.00 %	1.40 %
30	0.04	0.03	0.08	0.03	0.50	1.00
35	0.07	0.04	0.09	0.05	0.50	1.10
40	0.10	0.06	0.11	0.07	0.80	1.50
45	0.15	0.10	0.16	0.10	1.30	1.60
50	0.23	0.15	0.27	0.14	1.80	1.70
55	0.38	0.25	0.46	0.35	1.90	0.80
60	0.64	0.44	0.43	0.43	1.60	0.50
65	1.27	0.82	0.55	0.40	1.40	0.50
70	2.22	1.44	1.45	0.82	1.50	0.50
75	3.87	2.44	2.42	1.31	1.40	0.80
80	6.83	4.09	4.78	2.92	1.00	0.70

The assumption for future mortality improvements is fully generational mortality improvements using Scale AA.

**Disabled Males:** 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.

**Disabled Females:** 60% of the PBGC Table Va for disabled females eligible for Social Security disability benefits.

Sample rates for Disabled Members are shown below:

Sample		
Attained	Disabled	Disabled
Ages	Males	Females
25	2.90 %	1.58 %
30	2.17	1.42
35	1.67	1.28
40	1.69	1.25
45	1.93	1.34
50	2.30	1.54
55	2.89	1.77
60	3.62	1.99
65	4.07	2.22
70	4.43	2.47
75	5.05	2.95
80	6.77	4.48

**Pre-Retirement Mortality Rates.** The mortality tables used to project the pre-termination mortality experience of plan members are the RP-2000 Combined tables with white-collar adjustment for males and females as the base table, and then to apply a 75% multiplier for state employees and a 50% multiplier for teachers.

Disabled and Pre-Retirement Mortality rates are static tables and do not reflect any future mortality improvements.

**Rates of separation from active membership** are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation on account of death or disability. Sample rates of separation from active employment are shown below:

Service	State Employe	es, Legislature
at Beginning	and Board o	of Governors
of Year	Male	Female
0	24.00 %	12.00 %
1	8.82	10.00
2	7.61	7.78
3	6.56	6.82
4	5.65	5.99
5	4.87	5.26
6	4.21	4.63
7	3.66	4.09
8	3.21	3.63
9	2.85	3.25
10	2.57	2.93
11	2.35	2.67
12	2.19	2.46
13	2.08	2.28
14	1.99	2.14
15	1.94	2.02
16	1.89	1.91
17	1.85	1.81
18	1.79	1.70
19	1.72	1.58
20	1.62	1.44
21	1.47	1.28
22	1.27	1.07
23	1.01	0.82
24	0.68	0.51
25 or more	0.00	0.00
Ref	511	512

State Police employees were assumed not to separate from employment for causes other than retirement, death, or disability.

Judicial employees were assumed not to separate from employment for causes other than retirement or death.

**The rates of retirement** used to measure the probability of eligible members retiring during the next year, were as follows:

State Employee rates of retirement are based on pension eligibility.

#### State Employee Pension Eligibility:

- I. Employees eligible to retire on or before June 30, 2012
  - a. Grandfathered Schedule A members—age 60 with 10 years of service, or at any age with 28 years of service.
  - b. Non-grandfathered Schedule A members—eligible at an individually determined age. This age is the result of interpolating between the retirement age under the rules applicable to grandfathered employees in (a) above and a minimum age of 62.
  - c. Schedule B members—age 65 with 10 years of service. Age 59 with 29 years of service by September 30, 2009. Age 62 if they have credit for 29 years of service with the minimum age of 62 adjusted downward similarly to (b) above.
- II. Employees first eligible to retire after June 30, 2012
  - a. After July 1, 2012, members are eligible to retire upon the attainment of the member's SSNRA and 5 years of service.
  - b. For members with 5 or more years of contributory service as of June 30, 2012, the retirement age will be adjusted downward in proportion to the amount of service the member has earned as of June 30, 2012. The adjusted retirement age is the result of interpolating between the retirement age as determined in (i)(b) or (i)(c) above and their SSNRA.

#### Nurses Pension Eligibility:

- Nurses who have reached age 50 with 25 years of service by September 30, 2009 are eligible to retire at age 50 with 25 years of service.
- Members who have not reached age 50 with 25 years of service by September 30, 2009 are able to retire when they reach age 55 with 25 years of service.
- For members in service as of October 1, 2009 who were not eligible to retire as of September 30, 2009 but who are eligible to retire on or prior to June 30, 2012, the minimum retirement age of 55 will be adjusted downward in proportion to the amount of service the member has earned as of September 30, 2009.

**Board of Governors** rates of retirement are based on the table on the following page.

Separate male and female rates, based on schedule, age and service are applied upon eligibility for pension retirement. For State Employees (excluding Correctional Officers) and Board of Governors members who reach 28 years of service before age 60, service-based rates are used. For State Employees (excluding Correctional Officers) and Board of Governors members who reach age 60 before reaching 28 years of service, age-based rates are used instead. The following table shows the probabilities of retirement.

	State Empl	loyees (exclu	ding Correnti	onal Officers	) and Board o	f Governors			
	Ma	ales		Females					
Service (	(00/28)	Age (	60/10)	Service	(00/28)	Age (60/10)			
Service	Ret. Rate	Age	Ret. Rate	Service	Ret. Rate	Age	Ret. Rate		
28	17.50%	60	10.00%	28	20.00%	60	15.00%		
29	13.00%	61	5.00%	29	15.00%	61	10.00%		
30	13.00%	62	17.50%	30	15.00%	62	20.00%		
31	13.00%	63	15.00%	31	15.00%	63	15.00%		
32	13.00%	64	15.00%	32	15.00%	64	15.00%		
33	17.50%	65	20.00%	33	15.00%	65	20.00%		
34	17.50%	66	17.50%	34	15.00%	66	25.00%		
35	40.00%	67	17.50%	35	40.00%	67	20.00%		
36	35.00%	68	17.50%	36	30.00%	68	20.00%		
37	35.00%	69	17.50%	37	30.00%	69	20.00%		
38	35.00%	70	17.50%	38	30.00%	70	20.00%		
39	35.00%	71	17.50%	39	30.00%	71	20.00%		
40	100.00%	72	17.50%	40	100.00%	72	20.00%		
		73	17.50%			73	20.00%		
		74	17.50%			74	20.00%		
		75	100.00%			75	100.00%		

State Employee Schedule B members: 60% of members are assumed to retire when first eligible, either at age 59 with 29 years of service, or at age 65 with 10 years of service. The rates in the table above are applied after first eligibility.

Correctional Officer rates of retirement are based on pension eligibility.

Correctional Officer Pension Eligibility:

- Correctional officers who have reached age 50 with 20 years of service as of September 30, 2009 are eligible to retire at age 50 with 20 years of service.
- Members who have not reached age 50 with 20 years of service by September 30, 2009 are eligible at age 55 with 25 years of service.
- For members in service as of October 1, 2009 who were not eligible to retire as of September 30, 2009 but who are eligible to retire on or prior to June 30, 2012, the minimum retirement age of 55 will be adjusted downward in proportion to the amount of service the member has earned as of September 30, 2009.
- After July 1, 2012, members are eligible to retire upon the attainment of the member's SSNRA and 5 years of service.

A set of unisex rates, indexed by service, as shown below, is applied upon eligibility for pension retirement. All members still active are assumed to retire at age 65 with 10 years of service.

Corrections										
Service	Service Ret. Rate Service Ret. R									
20-29	5.00%	35	35.00%							
30	13.00%	36	25.00%							
31	13.00%	37	25.00%							
32	13.00%	38	25.00%							
33	20.00%	39	25.00%							
34	20.00%	40	100.00%							

State Police rates of retirement are based on the age at first pension eligibility.

State Police Pension Eligibility:

- Employees eligible to retire on or before June 30, 2012:
  - Members hired before July 1, 2007 are eligible for retirement at any age after completion of 20 years of service. Members hired on or after July 1, 2007 are eligible for retirement at any age after completion of 25 years of service.
- Employees first eligible to retire after June 30, 2012:

Any member of the state police may retire at any time subsequent to the date the member's retirement allowance equals or exceeds 50% of average compensation.

State Police									
Hired before July 1, 2007		Hired on/after July 1, 2007							
Years after First Pension Eligibility	Ret. Rate	Years after First Pension Eligibility	Ret. Rate						
0	25.00%	0	35.00%						
1	15.00%	1	25.00%						
2	10.00%	2	20.00%						
3	20.00%	3	30.00%						
4	30.00%	4	40.00%						
5+	100.00%	5+	100.00%						

100% of State Police members are assumed to retire at age 60 and completion of 20 years of service (25 years of service for members hired after July 1, 2007) if still active.

**Judges** are assumed to retire when eligible for an unreduced retirement benefit (age 65 with 20 years of service, or age 70 with 15 years of service.) 33% of Judges are assumed to retire at age 65 with 10 years of service, or any age with 20 years of service. Judges who have not reached eligibility for an unreduced retirement benefit by age 75 are assumed to terminate at age 75.

**Legislators** - Separate male and female rates, based on schedule, age and service. For members who reach 20 years of service before age 55, service-based rates are used. For members who reach age 55 before reaching 20 years of service, age-based rates are used instead. The following table shows the probabilities of retirement.

	Legislators										
	Ma	les		Females							
Service (	(00/20)	Age (	(55/8)	Service (00/20)			Age (55/8)				
Service	Ret. Rate	Age	Ret. Rate	Service	Ret. Rate	Age	Ret. Rate				
20	15.00%	55	15.00%	20	15.00%	55	15.00%				
21	15.00%	56	15.00%	21	15.00%	56	15.00%				
22	15.00%	57	15.00%	22	15.00%	57	15.00%				
23	15.00%	58	15.00%	23	15.00%	58	15.00%				
24	15.00%	59	15.00%	24	15.00%	59	15.00%				
25	15.00%	60	10.00%	25	15.00%	60	15.00%				
26	15.00%	61	5.00%	26	15.00%	61	10.00%				
27	15.00%	62	17.50%	27	15.00%	62	20.00%				
28	17.50%	63	15.00%	28	20.00%	63	15.00%				
29	13.00%	64	15.00%	29	15.00%	64	15.00%				
30	13.00%	65	20.00%	30	15.00%	65	20.00%				
31	13.00%	66	17.50%	31	15.00%	66	25.00%				
32	13.00%	67	17.50%	32	15.00%	67	20.00%				
33	17.50%	68	17.50%	33	15.00%	68	20.00%				
34	17.50%	69	17.50%	34	15.00%	69	20.00%				
35	40.00%	70	17.50%	35	40.00%	70	20.00%				
36	35.00%	71	17.50%	36	30.00%	71	20.00%				
37	35.00%	72	17.50%	37	30.00%	72	20.00%				
38	35.00%	73	17.50%	38	30.00%	73	20.00%				
39	35.00%	74	17.50%	39	30.00%	74	20.00%				
40	100.00%	75	100.00%	40	100.00%	75	100.00%				

100% of Legislators are assumed to retire at age 65 and completion of 10 years of service.

**Retirement rates** were also set for all Schedule B (state employee and teacher, male and female) members eligible for ERSRI reduced retirement and Board of Governors, whether state employees or teachers, whether males or females, as follows:

Retirement	State Employees and					
Age	<b>Board of Governors</b>					
55-58	0 %					
59	1					
60	2					
61	2					
62	2					
63	3					
64	4					

**Rates of disability** among active members are used to estimate the incidence of member disability in future years.

**Percent Becoming Disabled Within Next Year** 

		State En	mlovees		<u> </u>	Legisla	Police			
Sample	Male			Female		ale		male	Male & Female	
Ages	Ordinary	Accidental	Ordinary	Accidental	Ordinary	Accidental	Ordinary Accidental		Ordinary	Accidental
20	0.02 %	0.01 %	0.03 %	0.01 %	0.02 %	0.01 %	0.03 %	0.01 %	0.03 %	0.09 %
25	0.04	0.02	0.05	0.01	0.03	0.02	0.05	0.01	0.04	0.13
30	0.04	0.02	0.06	0.01	0.04	0.02	0.06	0.01	0.06	0.17
35	0.06	0.03	0.08	0.02	0.05	0.03	0.08	0.02	0.07	0.22
40	0.09	0.04	0.11	0.02	0.08	0.05	0.11	0.02	0.11	0.33
45	0.14	0.06	0.18	0.04	0.13	0.08	0.18	0.04	0.18	0.54
50	0.24	0.11	0.31	0.06	0.21	0.14	0.31	0.06	0.30	0.91
55	0.40	0.18	0.51	0.10	0.35	0.23	0.51	0.10	0.30	0.91
60	0.56	0.25	0.71	0.14	0.49	0.32	0.71	0.14	0.30	0.91
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.91
Ref	#800x0.4	#800x0.18	#800x0.5	#800x0.1	#800x0.35	#800x0.225	#800x0.5	#800x0.1	#291x0.25	#291x0.75

Judges are not assumed to become disabled.

*Health care trend rates* used in the valuation were as shown below.

Medical and Prescription Drug Trend Rate Increases from Prior Year

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Year	Intermediate	Pessimistic	Optimistic
2012	9.00 %	11.00 %	7.00 %
2013	8.25	10.00	6.50
2014	7.50	9.25	6.00
2015	7.00	8.50	5.50
2016	6.50	7.75	5.25
2017	6.00	7.00	5.00
2018	5.50	6.25	4.75
2019	5.00	5.50	4.50
2020	4.50	4.75	4.25
2021	4.00	4.00	4.00
2022 & Later	4.00	4.00	4.00

Dental and Vision rates were assumed to increase by 4.0% each year.

#### MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

**Decrement Timing:** Decrements of all types are assumed to occur mid-year.

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday

and service nearest whole year on the date the decrement is assumed to

occur.

**Incidence of Contributions:** Contributions are assumed to be received continuously throughout the

year based upon the computed percent of payroll shown in this report,

and the actual payroll payable at the time contributions are made.

**Deferred Vested Members:** It is our understanding that the Deferred Vested Benefits have been

eliminated for all groups except Board of Governors. Reported terminations from the Board of Governors were indicated to not have

coverage and were therefore excluded from the valuation.

**Dental and Vision:** With the exception of State Police retirees, Dental and Visions Benefits

were assumed to be fully paid by the retiree.

Census Data: We received data from the State and United Health Services. The data

was merged and adjusted for duplicates. There were significant changes in retirement membership for State employees. Active teachers were excluded as their future benefits are for disability benefits fully paid by

the member.

Marriage Assumption: 85% members are assumed to be married for purposes of death-in-

service benefits. Male spouses are assumed to be three years older than

female spouses for active member valuation purposes.

No surviving spouse is assumed to re-marry and there will be no

children's benefit.

**Election Percentage:** It was assumed that 90% of State employees, 80% of Judges and Board

of Governors, 60% of Legislators and 100% of State Police active members will elect to receive retiree health care benefits through the

State upon retirement.

Of those assumed to elect coverage, 85% of Police employees, 62.5% of Judges and Legislators, and 25% of State employees and Board of Governors were assumed to elect two-person coverage, if eligible. For those that elect two-person coverage, it was assumed that coverage

would continue to the spouse 50% of the time upon death of Judges retirees, if eligible, and 100% of the time for all other retirees, if eligible.

For active employees who have opted out of the State's active health care plan, it was assumed they would elect retiree health care coverage

upon retiring under the assumptions above.

**Medicare Coverage:** Assumed to be available for all covered employees on attainment of age

65. Retirees were assumed to elect to participate in Medicare. Current Teacher retirees over the age of 65 participating in the Early Retiree plan were assumed not to co-ordinate with Medicare. Police were

assumed to elect United 65.

#### MISCELLANEOUS AND TECHNICAL ASSUMPTIONS (CONCLUDED)

#### Post-65 Health Care Plan Election:

State Employees: The current retired population is assumed to have the following plan elections: 1% electing the Active or Early Retiree Plan, 45% electing the Medicare HMO, and 54% electing Plan 65. Future retirees are assumed to elect Plan 65 when they reach age 65.

State Police: Current Post-65 retirees enrolled in the Active or Early Retiree plan are assumed to remain in that plan. All other current and future Post-65 retirees are assumed to be access only and have no OPEB liability.

Teachers: Current Post-65 retirees enrolled in the Active or Early Retiree plan are assumed to remain in that plan. All other current and future Post-65 retirees are assumed to be access only and have no OPEB liability.

Judges: 29% of current retirees are assumed to remain in the Active plan when they reach age 65. 71% of current retirees are assumed to join a Medicare coordinating plan when they reach age 65. Future retirees are assumed to have the following plan elections when they reach age 65: 25% Early Retiree plan, 28% Medicare HMO, and 47% Plan 65.

Legislators: 30% of current retirees are assumed to remain in the Active plan when they reach age 65. 70% of current retirees are assumed to join a Medicare coordinating plan when they reach age 65. Future retirees are assumed to have the following plan elections when they reach age 65: 7% Early Retiree plan, 40% Medicare HMO, and 53% Plan 65.

Board of Governors: All current and future Post-65 retirees are assumed to elect Plan 65.

#### **Medicare Late-Entry Penalty:**

Retired Judges and Legislators moving from the Active plan to the Medicare plan may be subject to a Medicare Late-Enrollment penalty. The State of Rhode Island is assumed to pay the penalty for those retirees moving from the Active to the Medicare plans. The valuation reflects the anticipated present value of future penalties.

#### **Excise Tax:**

An adjustment of 7.4% is applied to pre-65 liabilities to reflect potential future excise taxes under the Patient Protection and Affordable Care Act.

Revised

#### **SECTION G**

# GOVERNMENTAL ACCOUNTING STANDARDS BOARD DISCLOSURES

This information is presented in draft form for review by the Plan and/or State auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the Plan and/or State financial statements.

# GASB STATEMENTS NO. 43 AND NO. 45 REQUIRED SUPPLEMENTARY INFORMATION

Name of Plan

Type of Plan

Valuation Date

Actuarial Cost Method

Amortization Method

**Remaining Amortization Periods** 

Asset Valuation Method

**Actuarial Assumptions:** 

**Discount Rate** 

**Projected Salary Increases** 

Valuation Health Care Cost Trend Rate

Intermediate

Rhode Island State Employees' and

**Electing Teachers OPEB** 

Agent Multiple-Employer Plan

June 30, 2011

Individual Entry Age

Level Dollar - Teachers, Judges, Legislators

Level Percent of Pay – All Others

4 Years Closed - Teachers

25 Years Closed - All Other

Actuarial Value – 4 Year Smoothing

5.00% Per Year

4.0% - 8.5%

9% in 2012, grading to 4.00% in 2021

# GASB STATEMENTS NO. 43 AND NO. 45 REQUIRED SUPPLEMENTARY INFORMATION

#### SCHEDULE OF FUNDING PROGRESS

(Dollars in Thousands)

	Actuarial Valuation Date	Actuar Value ( Asset (a)	of	Actuarial Accrued Liability (AAL) (b)		Unfunded AAL (UAAL) (b-a)		Fund Rat (a/t	io	Covered Payroll (c)		UAAL as a Percentage of Covered Payroll ([b-a]/c)
Judges												
•	6/30/2005	\$	0	\$	76	\$	76	0.0	%	\$	5,685	1.3%
	6/30/2007	(	)		14,024		14,024	0.0	%		9,888	141.8%
	6/30/2009	(	)		8,665		8,665	0.0	%		9,395	92.2%
	6/30/2011	84	1		2,610		1,769	32.2	%		10,813	16.4%
Legisla	ntors											
	6/30/2005	(	)		3,919		3,919	0.0	%		1,509	259.7%
	6/30/2007		)		29,764		29,764	0.0	%		1,592	1869.6%
	6/30/2009	(	)		11,752		11,752	0.0	%		1,612	729.0%
	6/30/2011	1,442	2		1,443		1	99.9	%		1,615	0.1%
State E	Employees											
	6/30/2005	(	)	580,041		580,041		0.0	%	575,613		100.8%
	6/30/2007	(	)	679,538		679,538		0.0	%	626,145		108.5%
	6/30/2009	(	)	673,640		673,640		0.0	%	574,569		117.2%
	6/30/2011	11,545	5	7	86,293		774,748	1.5	%		600,273	129.1%
Teache	er											
	6/30/2005	(	)		8,477		8,477	0.0	%		N/A	N/A
	6/30/2007	(	)		10,243		10,243	0.0	%		N/A	N/A
	6/30/2009	(	)		13,529		13,529	0.0	%		N/A	N/A
	6/30/2011	2,040	)		11,512		9,472	17.7	%		N/A	N/A
State P	Police											
	6/30/2005	(	)		51,037		51,037	0.0	%		13,821	369.3%
	6/30/2007	(	)		54,620		54,620	0.0	%		15,977	341.9%
	6/30/2009	(	)		67,079		67,079	0.0	%		16,725	401.1%
	6/30/2011	1,488	3		81,759		80,271	1.8	%		17,384	461.8%
Board	of Governors											
	6/30/2006	(	)		64,288		64,288	0.0	%		156,027	41.2%
	6/30/2007	(	)		57,881		57,881	0.0	%		110,092	52.6%
	6/30/2009	(	)		58,476		58,476	0.0	%		106,665	54.8%
	6/30/2011	3,189	7		53,751		50,562	5.9	%		125,340	40.3%

# GASB STATEMENTS NO. 43 AND NO. 45 REQUIRED SUPPLEMENTARY INFORMATION

## SCHEDULE OF EMPLOYER CONTRIBUTIONS (Dollars in Thousands)

	Valuation Date	Fiscal Year Ending	Annual Required Contribution	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation			
Judges	2								
o dage.	6/30/2005	6/30/2008	0.08%	\$ 1,109	15.34%	\$ 1,853			
	6/30/2005 <sup>R</sup>	6/30/2009	0.17%	1,109	15.34%	1,853			
	6/30/2007	6/30/2010 <sup>a</sup>	11.64%	1,131	15.33%	2,811			
	6/30/2007	6/30/2011 <sup>b</sup>	9.86%	1,013	97.32%	2,839			
	6/30/2009	6/30/2012	7.19%						
	6/30/2009	6/30/2013	7.19%						
	6/30/2011	6/30/2014	0.12%						
	6/30/2011	6/30/2015	0.12%						
Legislators									
	6/30/2005	6/30/2008	18.63%	298	48.40%	378			
	6/30/2005 <sup>R</sup>	6/30/2009	17.02%	298	48.40%	378			
	6/30/2007	6/30/2010 <sup>a</sup>	116.91%	1,861	7.72%	2,095			
	6/30/2007	6/30/2011 <sup>b</sup>	95.49%	1,541	98.62%	2,116			
	6/30/2009	6/30/2012	46.35%						
	6/30/2009	6/30/2013	46.35%						
	6/30/2011	6/30/2014	0.00%						
	6/30/2011	6/30/2015	0.00%						
State Employees									
	6/30/2005	6/30/2008	6.01%	34,683	96.17%	0			
	6/30/2005 <sup>R</sup>	6/30/2009	7.69%	34,683	96.17%	0			
	6/30/2007	6/30/2010 <sup>a</sup>	7.91%	45,852	73.07%	0			
	6/30/2007	6/30/2011 <sup>b</sup>	6.74%	41,120	100.00%	0			
	6/30/2009	6/30/2012	6.86%						
	6/30/2009	6/30/2013	6.86%						
	6/30/2011	6/30/2014	7.80%						
	6/30/2011	6/30/2015	7.80%						

*R* The June 30, 2005 valuation was restated to determine the ARC for the fiscal year ending June 30, 2009.

a Based in a discount rate of 3.566%.

b Based on a discount rate of 5.00%.

# GASB STATEMENTS NO. 43 AND NO. 45 REQUIRED SUPPLEMENTARY INFORMATION

## SCHEDULE OF EMPLOYER CONTRIBUTIONS (Dollars in Thousands)

Valuation	Fiscal Year	Annual Required	Annual OPEB	Percentage of Annual OPEB	Net OPEB				
Date	Ending	Contribution	Cost	Cost Contributed	Obligation				
Teachers									
6/30/2005	6/30/2008	1,428	\$ 2,180	100.00%	\$ 0				
6/30/2005 <sup>R</sup>	6/30/2009	2,180	2,180	100.00%	0				
6/30/2007	6/30/2010 <sup>a</sup>	2,345	2,345	100.00%	0				
6/30/2007	6/30/2011 <sup>b</sup>	1,338	2,333	100.00%	0				
6/30/2009	6/30/2012	2,601							
6/30/2009	6/30/2013	2,601							
6/30/2011	6/30/2014	1,370							
6/30/2011	6/30/2015	1,370							
State Police									
6/30/2005	6/30/2008	30.27%	4,609	43.55%	5,850				
6/30/2005 <sup>R</sup>	6/30/2009	25.78%	4,609	43.55%	5,850				
6/30/2007	6/30/2010 <sup>a</sup>	29.83%	4,640	48.88%	8,222				
6/30/2007	6/30/2011 <sup>b</sup>	25.67%	4,296	98.13%	8,302				
6/30/2009	6/30/2012	33.18%							
6/30/2009	6/30/2013	33.18%							
6/30/2011	6/30/2014	39.00%							
6/30/2011	6/30/2015	39.00%							
Board of Governors									
6/30/2006	6/30/2008	3.95%	1,572	77.00%	0				
6/30/2007	6/30/2009	4.30%	1,572	77.00%	0				
6/30/2007	6/30/2010 <sup>a</sup>	4.15%	1,665	53.20%	0				
6/30/2009	6/30/2011 <sup>b</sup>	3.61%	2,869	100.00%	0				
6/30/2009	6/30/2012	3.61%							
6/30/2009	6/30/2013	3.61%							
6/30/2011	6/30/2014	2.65%							
6/30/2011	6/30/2015	2.65%							

R The June 30, 2005 valuation was restated to determine the ARC for the fiscal year ending June 30, 2009.

a Based in a discount rate of 3.566%.

b Based on a discount rate of 5.00%.

# APPENDIX A

#### GASB BACKGROUND

The purpose of this valuation is to provide information on the cost associated with providing postemployment benefits other than pensions, or OPEB, to current and former employees. OPEB benefits are most often associated with postemployment health care, but cover almost any benefit not provided through a pension plan, including life insurance, dental and vision benefits. It is important to note that OPEB benefits, by definition, do not include benefits *currently* being provided to active employees – however, this report includes the liabilities for benefits expected to be paid to current active employees when they terminate employment at a future date.

The rising cost of health care has been a cause of concern to both individuals and employers who sponsor health care plans. The accounting community became concerned that many sponsors of public plans were accounting for the cost of their OPEB plans solely on the basis of benefits paid and that this method did not accurately reflect the ultimate cost of benefits promised to current and former employees. In 1988, the Governmental Accounting Standards Board (GASB) began working on a project to develop comprehensive standards for financial reporting of OPEB plans.

The GASB determined that an OPEB plan was similar to a pension plan in that benefits are earned during an active employee's working lifetime but paid out at a future date. In the GASB's view, accounting for OPEB should follow the same basic principle as accounting for public plan pension costs. These benefits are compensation for employees' services and should be accounted for during the period of time that services are performed.

#### GASB STANDARDS

Unlike pension plans, OPEB plans often do not have a formal document detailing the specific terms of the plan. Under GASB Statements No. 43 and No. 45 the benefits to be accounted for are those provided by the *substantive plan* – loosely defined as the benefits covered by the plan as understood by the employer and plan members at the time of each actuarial valuation. The substantive plan provisions used in this valuation are summarized in the Summary of Benefit Provisions and Valuation Data Section.

GASB also requires that the calculations assume the terms of the substantive plan continue indefinitely. It has been argued that there is a likelihood future OPEB plan provisions would be different than the current substantive plan (due to rising health care costs or social changes) and therefore liabilities based on the current substantive plan may overstate what will actually occur. However, the GASB Statement is designed to measure liabilities for the plan as it currently exists. While it may be reasonable to assume future changes in the OPEB plan for other purposes, recognition of anticipated changes is not allowed for purposes of accounting for OPEB.

The specific items required to be disclosed on an OPEB sponsor's financial statements are described in detail in GASB Statements No. 43 and No. 45. In general terms, though, the plan sponsor is required to disclose an annual OPEB cost, the funded status of the plan and the funding progress on the valuation date.

Although GASB does not require OPEB contributions, it has chosen to call the base component of the annual OPEB cost the Annual Required Contribution, or ARC. The ARC consists of the cost of benefits accruing in a year plus an amount calculated to amortize any unfunded actuarial accrued liability over a period of not more than 30 years.

The funded status of the plan is a ratio of the plan's assets (if any) to the actuarial accrued liability on the valuation date. The plan is also required to disclose the cumulative difference between the ARC and the employer's actual contribution to the plan. This amount is known as the Net OPEB Obligation (NOO). Each year, the NOO accumulates with interest, plus the difference between the ARC and actual contributions for the year, plus some technical adjustments. For most plans the NOO is set to zero as of the effective date of the GASB OPEB standard. It is the NOO, and not the actuarial accrued liability, that will be disclosed on the employers' Statement of Net Assets.

#### **OPEB SPECIFIC ASSUMPTIONS**

In any long-term actuarial valuation (such as for pensions and OPEB), certain demographic, economic and behavioral assumptions must be made concerning the population, investment discount rates, and the benefits provided. These actuarial assumptions form the basis for the actuarial model which is used to project the future population, benefits to be provided, and contributions to be collected. The investment return rate assumption is used to discount the future benefits to a present value on the valuation date. While assumptions such as future rates of retirement and mortality are similar for both OPEB and pension plans, there are some additional assumptions required when projecting benefits for a health care plan.

The cost of providing medical services has been increasing more rapidly than prices in general for many years. During the period from 1957 to 2011 general inflation averaged 4.0%, while health expenditures increased by an average of about 10% per year. If this trend is projected to continue for years to come, it implies that years from now virtually all our expenditures will be for health care. The seemingly more reasonable alternative is that in the not too distant future medical expense inflation will stabilize at a level at or near general inflation. It is on this basis that we project that retiree health care costs will continue to exceed general inflation in the near term, but by less each year until leveling off at an ultimate rate that is similar to general price increases.

Health care trend rates used in this valuation lie within a range of reasonable assumptions, and are described on page F-12 of this report. The health care trend rate assumption has a major effect on the calculation of plan liabilities. To illustrate the effect of differing future medical inflation rates, the sensitivity analysis in Section B shows principal valuation result under intermediate, optimistic, and pessimistic assumptions.

# APPENDIX B

#### **GLOSSARY**

**Accrued Service -** The service credited under the plan which was rendered before the date of the actuarial valuation.

**Actuarial Accrued Liability -** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

**Actuarial Assumptions -** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Actuarial Cost Method** - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

**Actuarial Equivalent -** A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

**Actuarial Present Value -** The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Amortization -** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

**Annual Required Contribution (ARC)** - The ARC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ARC is an amount that is actuarially determined in accordance with the requirements so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded liability.

Governmental Accounting Standards Board (GASB) - GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.

**Implicit Rate Subsidy** – It is a common practice for employers to allow retirees to continue in the employers group health insurance plan (which also covers active employees), often charging the retiree some portion of the premium charged for active employees. Under the theory that retirees have higher utilization of services, the difference between the true cost of providing retiree coverage and what the retiree is being charged is known as the implicit rate subsidy.

#### GLOSSARY (CONCLUDED)

**Medical Trend Rate (Health Care Inflation) -** The increase in the cost of providing health care benefits over time. Trend includes such elements as pure price inflation, changes in utilization, advances in medical technology, and cost shifting.

**Normal Cost** - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

**Other Postemployment Employee Benefits (OPEB) -** OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs or other health care benefits.

**Reserve Account -** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

**Unfunded Actuarial Accrued Liability -** The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

**Valuation Assets -** The value of current plan assets recognized for valuation purposes.



May 18, 2012

Mr. Thomas Mullaney State Budget Officer Department of Administration Building One Capitol Hill Providence, Rhode Island 02908

Re: Rhode Island State Employees' and Electing Teachers OPEB Valuation

Dear Mr. Mullaney:

Enclosed are 40 copies of the actuarial valuation of the Rhode Island State Employees' and Electing Teachers OPEB report.

Respectfully submitted,

David T. Kausch, FSA, EA, MAAA

David Tfausch

DTK:lr Enclosures