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December 19, 2014

Ms. Cynthia W. Comer
Policy, Planning and Compliance Director
Virginia Retirement System
1200 E. Main Street
Richmond, VA 23219

Dear Ms. Comer:

Enclosed are 13 original bound copies of the "Report on the Actuarial Valuation of the Virginia Retirement System" prepared as of June 30, 2014.

Please let us know if you have any questions concerning the report.

Sincerely,

Jose I. Fernandez, ASA, FCA, EA, MAAA
Principal and Consulting Actuary

TJC/JIF:jmy

Enclosure

S:\Virginia RS\2014\Valuations\Pension\Non-Local\Valuation VRS 2014 with Locals (Linked).docx

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**Virginia
Retirement
System**

**Report on the Actuarial Valuation for
Virginia Retirement System**

Prepared as of June 30, 2014





Cavanaugh Macdonald

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December 19, 2014

The Board of Trustees
Virginia Retirement System
1200 E. Main Street
Richmond, VA 23219

Dear Trustees:

We are pleased to submit the results of the annual actuarial valuation for the following divisions of the Virginia Retirement System (VRS), prepared as of June 30, 2014.

- State Employees
- Teachers
- State Police (SPORS)
- Judicial
- Virginia Law Officers (VaLORS)

In addition, this report includes information in aggregate on the actuarial valuations of the Political Subdivisions participating in VRS as of June 30, 2014. We have prepared and provided separately, actuarial valuation reports for each of the Political Subdivisions. Please refer to the individual reports for the valuation results, summary of actuarial assumptions and methods, and plan provisions for each of the Political Subdivision plans.

The purpose of this report is to provide a summary of the funded status of VRS as of June 30, 2014, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 27 (GASB 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation results indicate that the full employer contribution rates shown in the table below are sufficient to fund the normal cost for all members and finance the unfunded accrued liability of the plans. We also present the expected employer contributions to be actually funded based on the percentage of the full rate adopted by the General Assembly. For comparison, in the table below we present the employer contribution rates based on the June 30, 2014 actuarial valuation, the employer contribution rates approved by the General Assembly for fiscal years ending 2013 and 2014, and the employer contribution rates approved by the General Assembly for fiscal years ending in 2015 and 2016. Contribution rates for VRS employers are established every two years. The actuarially calculated employer contribution rates based on the June 30, 2014 valuation presented in this report are for informational purposes only. The June 30, 2014 valuation includes Hybrid Plan members for the first time. In the table below we present the employer rate for the defined benefit component of the Hybrid Plan and the average employer rate for the defined contribution component.

System	Fiscal Years 2013 & 2014		Fiscal Years 2015 & 2016		Informational Only		
	Board Approved	General Assembly Approved	Board Approved	General Assembly Approved	Full Employer Contribution Rate for Defined Benefit Plan	Employer Rate for Hybrid DC Component	Total Employer Rate for Retirement Plans
	2011 Valuation		2013 Valuation		2014 Valuation		
State	13.07%	8.76%	15.79%	12.32%	15.14%	0.03%	15.17%
Teachers	16.77%	11.66%	18.19%	14.50%	17.51%	0.01%	17.52%
SPORS	32.62%	24.74%	32.93%	27.63%	29.58%	N/A	29.58%
VaLORS	19.52%	14.80%	21.74%	18.24%	20.78%	N/A	20.78%
Judicial	54.11%	45.44%	57.84%	51.66%	53.44%	N/A	53.44%
Political Subdivisions (Average rates)	10.63%	N/A	9.91%	9.91%	8.81%	0.02%	8.83%

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December 19, 2014
The Board of Trustees
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The promised benefits of VRS are included in the calculated contribution rates which are developed using the entry age normal cost method. The valuation takes into account the differentiation between Plan 1 vested members, Plan 1 non-vested members as of January 1, 2013 resulting from HB 1130 and SB 498, and Plan 2 members. The June 30, 2014 valuation is the first valuation to reflect the Hybrid Retirement Plan for eligible new hires on or after January 1, 2014 and for members who elected to opt into the Hybrid Plan. Five-year smoothed market value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability. In accordance with the supplemental contribution provision under the 2011 Appropriations Act, Item 469(l)(6), the portion of the unfunded accrued liability with respect to deferred contributions for the 2010 -2012 biennium is amortized using a level-dollar, closed, 10 year period beginning June 30, 2011. In accordance with the funding policy adopted by the Board of Trustees in 2013, the balance of the unfunded accrued liability as of June 30, 2013 is being amortized by regular annual contributions as a level percentage of payroll over a closed 29-year period and the change in the unfunded accrued liability for the year ended June 30, 2014 over a closed 20-year period. The amortization of the unfunded accrued liability assumes that payroll will increase by 3% annually and the amortization period will decrease by one year until reaching 0 years. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 27.

We have prepared the Schedule of Funding Progress and Trend Information shown in the financial section of the Comprehensive Annual Financial Report and all supporting schedules, including the Schedule of Active Member Data, the Solvency Test and the Analysis of Financial Experience shown in the actuarial section of the Comprehensive Annual Financial Report. For completeness, the table of Changes in Unfunded Actuarial Accrued Liabilities in Section VII, the Solvency Test in Schedule A, and the Retiree and Beneficiary Data in Schedule I include the information with respect to the Political Subdivisions participating in VRS.

Our organization has only a contractual relationship with the Virginia Retirement System to provide actuarial consulting services and we do not provide other services to nor have a financial interest in the Virginia Retirement System. There are no known interests or relationships that our firm has with the Virginia Retirement System that may impair or appear to impair the objectivity of our work.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the System and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.



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The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Jose I. Fernandez'.

Jose I. Fernandez, ASA, FCA, EA, MAAA
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'John J. Garrett'.

John J. Garrett, ASA, FCA, MAAA
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Micki R. Taylor'.

Micki R. Taylor, ASA, FCA, MAAA
Senior Actuary



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Section I – Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results for State Employees, Teachers, State Police, Judicial and Virginia Law Officers are summarized below. In addition, we present a summary of the valuation results for the political subdivisions.

**STATE EMPLOYEES
(\$ IN THOUSANDS)**

VALUATION DATE	June 30, 2014	June 30, 2013
Members:		
Active	75,730	75,879
Long Term Disability	2,135	2,080
Retirees and Beneficiaries	57,482	55,658
Inactive, Vested	11,602	11,289
Inactive, Non-Vested	23,782	22,718
Inactive, active elsewhere in VRS	<u>9,022</u>	<u>9,121</u>
Total	179,753	176,745
Annual Covered Payroll	\$ 3,854,779	\$ 3,716,548
Annual Retirement Benefits	\$ 1,068,340	\$ 1,021,641
Total Assets:		
Actuarial Value	\$ 14,826,208	\$ 13,714,404
Market Value	16,168,535	14,502,362
Actuarial Accrued Liability	\$ 21,822,936	\$ 21,068,651
Unfunded Actuarial Accrued Liability (UAAL):		
10-Year Payback of Deferred Contributions	213,467	\$ 236,520
Balance of UAAL	<u>6,783,261</u>	<u>7,117,727</u>
Total UAAL	\$ 6,996,728	\$ 7,354,247
RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING	For Informational Purposes	2015 & 2016
Employer Contribution Rate Defined Benefit Plan:		
Normal Cost (net of employee contributions)	4.29 %	4.28 %
Amortization of Deferred Contributions	0.98 %	1.00 %
Amortization of Balance of UAAL	<u>9.87 %</u>	<u>10.51 %</u>
Annual Recommended Contribution	15.14 %	15.79 %
Employer Contribution Rate Defined Contribution	<u>0.03 %</u>	N/A
Total Employer Contribution Rate Retirement Plans	15.17 %	15.79 %
Amortization Period (Years):		
Deferred Contributions	7	8
Balance of UAAL	20-29	30
Effective Amortization Period Total UAAL	26.6	27.0



Section I – Summary of Principal Results

TEACHERS
(\$ IN THOUSANDS)

VALUATION DATE	June 30, 2014	June 30, 2013
Members:		
Active	146,977	147,257
Retirees and Beneficiaries	81,423	77,699
Inactive, Vested	20,060	19,148
Inactive, Non-Vested	28,958	30,249
Inactive, active elsewhere in VRS	<u>5,380</u>	<u>5,391</u>
Total	282,798	279,744
Annual Covered Payroll	\$ 7,362,793	\$ 7,211,543
Annual Retirement Benefits	\$ 1,821,825	\$ 1,720,924
Total Assets:		
Actuarial Value	\$ 27,026,576	\$ 24,724,679
Market Value	29,411,183	26,076,425
Actuarial Accrued Liability	\$ 41,297,669	\$ 39,852,334
Unfunded Actuarial Accrued Liability (UAAL):		
10-Year Payback of Deferred Contributions	\$ 572,229	\$ 634,026
Balance of UAAL	<u>13,698,864</u>	<u>14,493,629</u>
Total UAAL	\$ 14,271,093	\$ 15,127,655
RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING	For Informational Purposes	2015 & 2016
Employer Contribution Rate Defined Benefit Plan:		
Normal Cost (net of employee contributions)	5.73 %	5.78 %
Amortization of Deferred Contributions	1.37 %	1.38 %
Amortization of Balance of UAAL	<u>10.41 %</u>	<u>11.03 %</u>
Annual Recommended Contribution	17.51 %	18.19 %
Employer Contribution Rate Defined Contribution	<u>0.01 %</u>	N/A
Total Employer Contribution Rate Retirement Plans	17.52 %	18.19 %
Amortization Period (Years):		
Deferred Contributions	7	8
Balance of UAAL	20-29	30
Effective Amortization Period Total UAAL	25.9	26.2



Section I – Summary of Principal Results

**STATE POLICE
(\$ IN THOUSANDS)**

VALUATION DATE	June 30, 2014	June 30, 2013
Members:		
Active	2,011	2,002
Long-Term Disability	13	11
Retirees and Beneficiaries	1,381	1,348
Inactive, Vested	112	110
Inactive, Non-Vested	167	141
Inactive, active elsewhere in VRS	<u>218</u>	<u>206</u>
Total	3,902	3,818
Annual Covered Payroll	\$ 112,303	\$ 109,006
Annual Retirement Benefits	\$ 48,853	\$ 47,303
Total Assets:		
Actuarial Value	\$ 662,244	\$ 591,983
Market Value	720,991	625,562
Actuarial Accrued Liability	\$ 1,029,155	\$ 996,690
Unfunded Actuarial Accrued Liability (UAAL):		
10-Year Payback of Deferred Contributions	2,785	\$ 19,706
Balance of UAAL	<u>364,126</u>	<u>385,001</u>
Total UAAL	\$ 366,911	\$ 404,707
RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING	For Informational Purposes	2015 & 2016
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	10.99 %	10.72 %
Amortization of Deferred Contributions	0.44 %	2.83 %
Amortization of Balance of UAAL	<u>18.15 %</u>	<u>19.38 %</u>
Annual Recommended Contribution	29.58 %	32.93 %
Amortization Period (Years):		
Deferred Contributions	7	8
Balance of UAAL	20-29	30
Effective Amortization Period Total UAAL	29.1	25.7



Section I – Summary of Principal Results

JUDICIAL
(\$ IN THOUSANDS)

VALUATION DATE	June 30, 2014	June 30, 2013
Members:		
Active	385	381
Retirees and Beneficiaries	522	503
Inactive, Vested	5	6
Inactive, Non-Vested	1	1
Inactive, active elsewhere in VRS	<u>4</u>	<u>7</u>
Total	917	898
Annual Covered Payroll	\$ 59,373	\$ 57,110
Annual Retirement Benefits	\$ 37,076	\$ 35,303
Total Assets:		
Actuarial Value	\$ 406,053	\$ 368,671
Market Value	442,194	388,835
Actuarial Accrued Liability	\$ 608,169	\$ 590,626
Unfunded Actuarial Accrued Liability (UAAL):		
10-Year Payback of Deferred Contributions	\$ 11,127	\$ 12,329
Balance of UAAL	<u>190,989</u>	<u>209,626</u>
Total UAAL	\$ 202,116	\$ 221,955
RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING	For Informational Purposes	2015 & 2016
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	32.31 %	34.31 %
Amortization of Deferred Contributions	3.31 %	3.38 %
Amortization of Balance of UAAL	<u>17.82 %</u>	<u>20.15 %</u>
Annual Recommended Contribution	53.44 %	57.84 %
Amortization Period (Years):		
Deferred Contributions	7	8
Balance of UAAL	20-29	30
Effective Amortization Period Total UAAL	25.0	25.2



Section I – Summary of Principal Results

**VIRGINIA LAW OFFICERS
(\$ IN THOUSANDS)**

VALUATION DATE	June 30, 2014	June 30, 2013
Members:		
Active	9,429	9,372
Long Term Disability	554	546
Retirees and Beneficiaries	3,706	3,415
Inactive, Vested	785	765
Inactive, Non-Vested	3,735	3,502
Inactive, active elsewhere in VRS	<u>2,266</u>	<u>2,181</u>
Total	20,475	19,781
Annual Covered Payroll	\$ 352,709	\$ 342,154
Annual Retirement Benefits	\$ 76,150	\$ 71,274
Total Assets:		
Actuarial Value	\$ 1,058,010	\$ 941,933
Market Value	1,150,450	992,031
Actuarial Accrued Liability	\$ 1,820,045	\$ 1,742,110
Unfunded Actuarial Accrued Liability (UAAL):		
10-Year Payback of Deferred Contributions	21,676	\$ 40,637
Balance of UAAL	<u>740,359</u>	<u>759,540</u>
Total UAAL	\$ 762,035	\$ 800,177
RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING	For Informational Purposes	2015 & 2016
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	7.84 %	7.70 %
Amortization of Deferred Contributions	1.09 %	1.86 %
Amortization of Balance of UAAL	<u>11.85 %</u>	<u>12.18 %</u>
Annual Recommended Contribution	20.78 %	21.74 %
Amortization Period (Years):		
Deferred Contributions	7	8
Balance of UAAL	20-29	30
Effective Amortization Period Total UAAL	26.6	25.6



Section I – Summary of Principal Results

**POLITICAL SUBDIVISIONS
(\$ IN THOUSANDS)**

VALUATION DATE	June 30, 2014	June 30, 2013
Number of Political Subdivisions in VRS	583	583
Members:		
Active	105,787	105,141
Long Term Disability	0	0
Retirees and Beneficiaries*	55,928	52,793
Inactive, Vested*	14,131	14,418
Inactive, Non-Vested*	33,799	32,628
Inactive, active elsewhere in VRS	<u>28,148</u>	<u>27,579</u>
Total	237,793	232,559
Annual Covered Payroll	\$ 4,453,787	\$ 4,340,988
Annual Retirement Benefits	\$742,487	\$ 695,251
Total Assets:**		
Actuarial Value	\$ 15,291,783	\$ 13,685,498
Market Value	16,627,539	14,393,949
Actuarial Accrued Liability**	\$ 18,962,779	\$ 18,156,606
Unfunded Actuarial Accrued Liability (UAAL)**	3,670,996	4,471,108
	For Informational Purposes	For Informational Purposes
Average Employer Contribution Rate Defined Benefit Plan (net of employee contributions)	8.81 %	9.91 %
Average Employer Contribution Rate Defined Contribution Plan	<u>0.02 %</u>	N/A
Average Employer Contribution Rate Retirement Plans	8.83 %	9.91 %
Amortization Period (Years)	20-29	30
Effective Amortization Period Total UAAL	32.6	30.0

* Includes count for each plan from which members are receiving pension benefits or entitled to deferred vested benefits. Therefore, members with benefits from more than one political subdivision are counted more than once. This does not include counts for Political Subdivisions with no active members.

** Includes Political Subdivisions with no active members.



Section I – Summary of Principal Results

2. Comments on the valuation results as of June 30, 2014 are given in Section IV and further discussion of the contribution level for each plan is set out in Section V.
3. Schedule B shows the development of the actuarial value of assets. Schedule E and Schedule F of this report outline the full set of actuarial assumptions and methods used in the current valuation. The valuation reflects a contribution timing adjustment based on feedback from the 2014 quadrennial actuarial audit of the Virginia Retirement System conducted by JLARC.
4. The valuation takes into account the effect of amendments to VRS through the valuation date. The main provisions of VRS, as summarized in Schedule G, were taken into account in the current valuation. The June 30, 2014 valuation is the first valuation to reflect the Hybrid Retirement Plan for eligible new hires on or after January 1, 2014 and for members that elected to opt into the Hybrid Plan.
5. In accordance with the supplemental contribution provision of the 2011 Appropriations Act, Item 469(l)(6), the portion of the unfunded accrued liability with respect to deferred contributions for the 2010-2012 biennium will be paid back to the plans over a 10-year period. Below we provide an estimate of the deferred contributions as provided by VRS. The valuation reflects special contributions of \$15 million for the State Police plan and \$15 million for the Virginia Law Officers plan to reduce the balance of the plans' deferred contributions as of June 30, 2014.

DIVISION	Deferred Contributions (\$ in thousands)	
	Outstanding Balance as of 6/30/2014	Outstanding Balance as of 6/30/2013
State Employees	\$ 213,467	\$ 236,520
Teachers	572,229	634,026
State Police	2,785	19,706
Virginia Law Officers	21,676	40,637
Judicial	11,127	12,329
Total	\$ 821,284	\$ 943,218



Section II – Membership Data

- Data regarding the membership of VRS for use as a basis of the valuation was furnished by VRS. The following table shows the number of active members and their annual compensation as of June 30, 2014 on the basis of which the valuation was prepared.

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS AS OF JUNE 30, 2014
(\$ IN THOUSANDS)

DIVISION	NUMBER	COMPENSATION
State Employees	75,730	\$3,854,779
Teachers	146,977	7,362,793
State Police	2,011	112,303
Judicial	385	59,373
Virginia Law Officers	9,429	352,709
Political Subdivisions	<u>105,787</u>	<u>4,453,787</u>
Total	340,319	\$16,195,744

- The following table shows a five-year history of active member valuation data. The data after June 30, 2011 includes the political subdivisions, while the data for valuation dates prior to June 30, 2011 does not include the political subdivisions.

TABLE 2
SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA

VALUATION DATE	NUMBER	ANNUAL PAYROLL (\$ IN THOUSANDS)	ANNUAL AVERAGE PAY	% CHANGE IN AVERAGE PAY
6/30/2014	340,319	\$ 16,195,744	\$ 47,590	2.56 %
6/30/2013	340,032	15,777,349	46,400	2.54 %
6/30/2012	340,029	15,386,038	45,249	0.50 %
6/30/2011	338,120	15,223,687	45,025	(4.44)%
6/30/2010	236,404	11,138,947	47,118	(0.19)%



Section II – Membership Data

- The following table shows the number and annual retirement benefits payable to retired members and survivors on the roll of VRS as of the valuation date.

TABLE 3
THE NUMBER AND ANNUAL RETIREMENT BENEFITS
OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS
ON THE ROLL AS OF JUNE 30, 2014
(\$ IN THOUSANDS)

TYPE OF RETIREMENT	DIVISION						TOTAL
	STATE EMPLOYEES	TEACHERS	STATE POLICE	JUDICIAL	VIRGINIA LAW OFFICERS	POLITICAL SUBDIVISIONS*	
Service:							
Number	48,550	74,378	992	376	3,260	44,411	171,967
Annual Benefits	\$944,140	\$1,693,026	\$39,355	\$30,578	\$71,103	\$596,418	\$3,374,620
Disability:							
Number	4,221	4,303	191	1	233	7,776	16,725
Annual Benefits	\$66,026	\$91,102	\$6,156	\$106	\$3,345	\$113,012	\$279,747
Survivors:							
Number	4,711	2,742	198	145	213	3,741	11,750
Annual Benefits	\$58,174	\$37,697	\$3,342	\$6,392	\$1,702	\$33,057	\$140,364
Total:							
Number	57,482	81,423	1,381	522	3,706	55,928	200,442
Annual Benefits	\$1,068,340	\$1,821,825	\$48,853	\$37,076	\$76,150	\$742,487	\$3,794,731

* Includes count for each plan from which members are receiving pension benefits or entitled to deferred vested benefits. Therefore, members with benefits from more than one political subdivision are counted more than once. This does not include counts for Political Subdivisions with no active members.

- The five tables of Schedule H, which can be found at the end of this document, show the distribution by age and service of the number and average annual compensation of active members for each division included in the valuation.



Section III – Assets

- Schedule C shows the additions and deductions to the assets of VRS for the year preceding the valuation date and a reconciliation of the fund balances at market value. As of June 30, 2014, the market value of assets used to determine the actuarial value of assets for each division is shown below:

TABLE 4
COMPARISON OF MARKET VALUE OF ASSETS
(\$ IN THOUSANDS)

DIVISION	JUNE 30, 2014 MARKET VALUE	JUNE 30, 2013 MARKET VALUE
State Employees	\$16,168,535	\$14,502,362
Teachers	29,411,183	26,076,425
State Police	720,991	625,562
Judicial	442,194	388,835
Virginia Law Officers	1,150,450	992,031
Political Subdivisions	<u>16,627,539</u>	<u>14,393,949</u>
Total Market Value of Assets	\$64,520,892	\$56,979,164

- Schedule B shows the development of the actuarial value of assets as of June 30, 2014. The following table shows the actuarial value of assets allocated among all divisions.

TABLE 5
COMPARISON OF ACTUARIAL VALUE OF ASSETS
(\$ IN THOUSANDS)

DIVISION	JUNE 30, 2014 ACTUARIAL VALUE	JUNE 30, 2013 ACTUARIAL VALUE
State Employees	\$14,826,208	\$13,714,404
Teachers	27,026,576	24,724,679
State Police	662,244	591,983
Judicial	406,053	368,671
Virginia Law Officers	1,058,010	941,933
Political Subdivisions	<u>15,291,783</u>	<u>13,685,498</u>
Total Actuarial Value of Assets	\$59,270,874	\$54,027,168



Section IV – Comments on Valuation

State Employees

1. The total valuation balance sheet on account of benefits as of June 30, 2014 shows that the State Employees plan has total prospective benefit liabilities of \$24,381,425,752, of which \$11,418,799,964 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$1,014,549,401 is for the prospective benefits payable on account of present inactive members, and \$11,948,076,387 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the State Employees plan has a total present actuarial value of assets of \$14,826,208,000 as of June 30, 2014. The difference of \$9,555,217,752 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$1,265,824,034 is the present value of future contributions expected to be made by members (at the rate of 5% of salary for Plan 1 and Plan 2 members and 4% for Hybrid members), and the balance of \$8,289,393,718 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the State Employees plan on account of retirement benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 4.29% of salary are required. This is net of the 4.98% blended employee contribution rate.
3. Prospective employer normal contributions at the above rate have a present value of \$1,292,665,941. When this amount is subtracted from \$8,289,393,718, which is the present value of the total future contributions to be made by the employers, there remains \$6,996,727,777 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by employers on account of retirement benefits be set at 10.85% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$6,996,727,777, on the assumption that the aggregate payroll for State employees will increase by 3% each year. See Schedule D for the amortization schedule for the unfunded accrued liability.
5. In addition, the employer makes a contribution to the defined contribution component of the Hybrid Plan. As of the valuation date the average employer defined contribution rate is 1.12% of pay for members in the Hybrid Plan. The employer defined contribution rate as a percent of the plan's total payroll is 0.03%.



Section IV – Comments on Valuation

Teachers

1. The total valuation balance sheet on account of benefits as of June 30, 2014 shows that the Teachers plan has total prospective benefit liabilities of \$48,175,078,005, of which \$21,754,563,411 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$965,811,510 is for the prospective benefits payable on account of present inactive members, and \$25,454,703,084 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the Teachers plan has a total present actuarial value of assets of \$27,026,576,000 as of June 30, 2014. The difference of \$21,148,502,005 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$3,024,110,047 is the present value of future contributions expected to be made by members (at the rate of 5% of salary for Plan 1 and Plan 2 members and 4% for Hybrid members), and the balance of \$18,124,391,958 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the Teachers plan on account of retirement benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 5.73% of salary are required. This is net of the 4.99% blended employee contribution rate.
3. Prospective employer normal contributions at the above rate have a present value of \$3,853,298,518. When this amount is subtracted from \$18,124,391,958, which is the present value of the total future contributions to be made by the employers, there remains \$14,271,093,440 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the employers on account of retirement benefits be set at 11.78% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$14,271,093,440, on the assumption that the aggregate payroll for Teachers will increase by 3% each year. See Schedule D for the amortization schedule for the unfunded accrued liability.
5. In addition, the employer makes a contribution to the defined contribution component of the Hybrid Plan. As of the valuation date the average employer defined contribution rate is 1.12% of pay for members in the Hybrid Plan. The employer defined contribution rate as a percent of the plan's total payroll is 0.01%.



Section IV – Comments on Valuation

State Police (SPORS)

1. The total valuation balance sheet on account of benefits as of June 30, 2014 shows that the SPORS plan has total prospective benefit liabilities of \$1,182,084,986, of which \$543,351,529 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$19,061,334 is for the prospective benefits payable on account of present inactive members, and \$619,672,123 is for the prospective benefits payable on account of present active members. Against these benefit liabilities SPORS has a total present actuarial value of assets of \$662,244,000 as of June 30, 2014. The difference of \$519,840,986 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$43,797,912 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$476,043,074 represents the present value of future contributions payable by the employers.
2. The employers' contributions to SPORS on account of retirement benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 10.99% of salary are required. This is net of the 5% employee contribution rate.
3. Prospective employer normal contributions at the above rate have a present value of \$109,131,735. When this amount is subtracted from \$476,043,074, which is the present value of the total future contributions to be made by the employers, there remains \$366,911,339 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the employers on account of retirement benefits be set at 18.59% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$366,911,339, on the assumption that the aggregate payroll for SPORS employees will increase by 3% each year. See Schedule D for the amortization schedule for the unfunded accrued liability.



Section IV – Comments on Valuation

Judicial

1. The total valuation balance sheet on account of benefits as of June 30, 2014 shows that the Judicial plan has total prospective benefit liabilities of \$735,410,091, of which \$367,781,777 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$2,482,850 is for the prospective benefits payable on account of present inactive members, and \$365,145,464 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the Judicial plan has a total present actuarial value of assets of \$406,053,000 as of June 30, 2014. The difference of \$329,357,091 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$16,952,872 is the present value of future contributions expected to be made by members (at the rate of 5% of salary for Plan 1 and Plan 2 members and 4% for Hybrid members), and the balance of \$312,404,219 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the Judicial plan on account of retirement benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 32.31% of salary are required. This is net of the 5.00% employee contribution rate.
3. Prospective employer normal contributions at the above rate have a present value of \$110,288,160. When this amount is subtracted from \$312,404,219, which is the present value of the total future contributions to be made by the employers, there remains \$202,116,059 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by employers on account of retirement benefits be set at 21.13% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$202,116,059, on the assumption that the aggregate payroll for Judicial employees will increase by 3% each year. See Schedule D for the amortization schedule for the unfunded accrued liability.



Section IV – Comments on Valuation

Virginia Law Officers (VaLORS)

1. The total valuation balance sheet on account of benefits as of June 30, 2014 shows that VaLORS has total prospective benefit liabilities of \$2,100,036,359, of which \$863,399,413 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$114,448,975 is for the prospective benefits payable on account of present inactive members, and \$1,122,187,971 is for the prospective benefits payable on account of present active members. Against these benefit liabilities VaLORS has a total present actuarial value of assets of \$1,058,010,000 as of June 30, 2014. The difference of \$1,042,026,359 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$97,990,582 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$944,035,777 represents the present value of future contributions payable by the employers.
2. The employers' contributions to VaLORS on account of retirement benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 7.84% of salary are required. This is net of the 5% employee contribution rate.
3. Prospective employer normal contributions at the above rate have a present value of \$182,000,549. When this amount is subtracted from \$944,035,777, which is the present value of the total future contributions to be made by the employers, there remains \$762,035,228 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by employers on account of retirement benefits be set at 12.94% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$762,035,228, on the assumption that the aggregate payroll for VaLORS employees will increase by 3% each year. See Schedule D for the amortization schedule for the unfunded accrued liability.



Section V – Contribution Rates

1. The actuarially determined employer contribution rates as a percent of payroll for each division based on the June 30, 2014 actuarial valuation are shown in the following table:

TABLE 6

Division	Employer Contribution Rate Defined Benefit Plan	Employer Contribution Rate Defined Contribution Plan	Employer Contribution Rate Retirement Plans
State Employees	15.14%	0.03%	15.17%
Teachers	17.51	0.01%	17.52
State Police	29.58	N/A	29.58
Judicial	53.44	N/A	53.44
Virginia Law Officers	20.78	N/A	20.78

The rates shown are net of member contributions.



Section V – Contribution Rates

2. The table below shows the development of the normal contribution rate, the unfunded accrued liability (UAL) rate, the actuarially recommended defined benefit plan contribution rate, the employer defined contribution plan rate and the total employer retirement plans contribution rate for each division as of June 30, 2014.

**TABLE 7
EMPLOYER CONTRIBUTION RATE
EXPRESSED AS PERCENT OF ACTIVE MEMBER PAYROLL**

	State Employees	Teachers	State Police	Judicial	Virginia Law Officers
<u>Employer Contribution Rate for Defined Benefit Plan</u>					
Normal Cost					
Service Retirement Benefits	6.61%	8.64%	12.64%	32.00%	7.45%
Disability Benefits	0.94%	0.52%	0.95%	4.28%	2.17%
Survivor Benefits	0.27%	0.17%	0.67%	1.03%	0.40%
Separation Benefits	<u>1.45%</u>	<u>1.39%</u>	<u>1.73%</u>	<u>0.00%</u>	<u>2.82%</u>
Total	9.27%	10.73%	15.99%	37.31%	12.84%
Member Current Contributions	<u>4.98%</u>	<u>4.99%</u>	<u>5.00%</u>	<u>5.00%</u>	<u>5.00%</u>
Employer Normal Cost	4.29%	5.74%	10.99%	32.31%	7.84%
Amortization of UAAL (<i>net of deferred contributions</i>) *	9.87%	10.41%	18.15%	17.82%	11.85%
Amortization of Deferred Contributions *	0.98%	1.37%	0.44%	3.31%	1.09%
Actuarially Recommended Employer Defined Benefit Plan Contribution Rate to pay Normal Cost and amortize UAAL	15.14%	17.51%	29.58%	53.44%	20.78%
<u>Defined Contribution Hybrid Plan</u>	0.03%	0.01%	N/A	N/A	N/A
Employer Contribution Rate for Retirement Plans	15.17%	17.52%	29.58%	53.44%	20.78%

* The amortization period of the unfunded less the deferred contribution begins at 30 years on June 30, 2013 and will decrease by one each year until reaching 0 years. Each subsequent year a new base will be added to the unfunded accrued liability and will be amortized over a closed 20 year period. The deferred contribution, as defined under 2011 Appropriations Act, Item 469(l)(6), is to be amortized using a level-dollar, closed, 10 year period. See Schedule D for the Amortization Schedules showing each base comprising the unfunded accrued liability.



Section VI – Accounting Information

1. Governmental Accounting Standards Board Statement 27 set forth certain items of required supplementary information to be disclosed in the financial statements of VRS and the employer. One such item is a distribution of the number of members by type of membership, as follows:

**NUMBER OF ALL MEMBERS
As of June 30, 2014**

GROUP	COUNT					
	State Employees	Teachers	State Police	Judicial	Virginia Law Officers	Political Subdivisions
Active Members	75,730	146,977	2,011	385	9,429	105,787
LTD	2,135	0	13	0	554	0
Total Active Members	77,865	146,977	2,024	385	9,983	105,787
Inactive Members						
Vested	11,602	20,060	112	5	785	14,131
Non-Vested	23,782	28,958	167	1	3,735	33,799
Active Elsewhere in VRS	9,022	5,380	218	4	2,266	28,148
Total Inactive Members	44,406	54,398	497	10	6,786	76,078
Retirees						
Service	48,550	74,378	992	376	3,260	44,411
Disabled	4,221	4,303	191	1	233	7,776
Beneficiaries	4,711	2,742	198	145	213	3,741
Total Retirees	57,482	81,423	1,381	522	3,706	55,928
Totals	179,753	282,798	3,902	917	20,475	237,793



Section VI – Accounting Information

2. Another such item is the schedule of funding progress as shown below.

**SCHEDULE OF FUNDING PROGRESS
(\$ IN THOUSANDS)**

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
STATE EMPLOYEES						
6/30/2014	\$14,826,208	\$21,822,936	\$6,996,728	67.9 %	\$3,854,779	181.5 %
6/30/2013	13,714,404	21,068,651	7,354,247	65.1 %	3,716,548	197.9 %
6/30/2012	13,740,366	20,944,258	7,203,892	65.6 %	3,713,119	194.0 %
6/30/2011	14,406,275	20,407,958	6,001,683	70.6 %	3,686,259	162.8 %
6/30/2010	14,700,854	19,539,453	4,838,599	75.2 %	3,514,396	137.7 %
6/30/2009	15,049,901	17,925,879	2,875,978	84.0 %	3,619,478	79.5 %
TEACHERS						
6/30/2014	\$27,026,576	\$41,297,669	\$14,271,093	65.4 %	\$7,362,793	193.8 %
6/30/2013	24,724,679	39,852,334	15,127,655	62.0 %	7,211,543	209.8 %
6/30/2012	24,391,761	39,090,408	14,698,647	62.4 %	7,004,577	209.8 %
6/30/2011	25,166,124	37,771,732	12,605,608	66.6 %	6,922,130	182.1 %
6/30/2010	25,447,677	37,088,576	11,640,899	68.6 %	7,119,889	163.5 %
6/30/2009	25,764,665	33,860,514	8,095,849	76.1 %	7,160,842	113.1 %
STATE POLICE						
6/30/2014	\$662,244	\$1,029,155	\$366,911	64.3 %	\$112,303	326.7 %
6/30/2013	591,983	996,690	404,707	59.4 %	109,006	371.3 %
6/30/2012	587,160	1,013,278	426,118	57.9 %	104,189	409.0 %
6/30/2011	616,603	985,704	369,101	62.6 %	99,669	370.3 %
6/30/2010	633,415	948,892	315,477	66.8 %	97,601	323.2 %
6/30/2009	646,960	879,180	232,220	73.6 %	100,974	230.0 %
JUDICIAL						
6/30/2014	\$406,053	\$608,169	\$202,116	66.8 %	\$59,373	340.4 %
6/30/2013	368,671	590,626	221,955	62.4 %	57,110	388.6 %
6/30/2012	361,097	582,456	221,359	62.0 %	56,958	388.6 %
6/30/2011	371,051	569,494	198,443	65.2 %	58,919	336.8 %
6/30/2010	372,096	559,920	187,824	66.5 %	61,021	307.8 %
6/30/2009	378,212	521,463	143,251	72.5 %	62,709	228.4 %
VIRGINIA LAW OFFICERS						
6/30/2014	\$1,058,010	\$1,820,045	\$762,035	58.1 %	\$352,709	216.1 %
6/30/2013	941,933	1,742,110	800,177	54.1 %	342,154	233.9 %
6/30/2012	909,399	1,753,014	843,615	51.9 %	344,616	244.8 %
6/30/2011	926,082	1,683,191	757,109	55.0 %	356,240	212.5 %
6/30/2010	925,443	1,579,321	653,878	58.6 %	346,040	189.0 %
6/30/2009	912,922	1,411,844	498,922	64.7 %	359,070	138.9 %
POLITICAL SUBDIVISIONS						
6/30/2014	\$15,291,783	\$18,962,779	\$3,670,996	80.6 %	\$4,453,787	82.4 %
6/30/2013	13,685,498	18,156,606	4,471,108	75.4 %	4,340,988	103.0 %
6/30/2012	13,079,788	17,824,190	4,744,402	73.4 %	4,162,579	114.0 %
6/30/2011	12,986,598	17,005,070	4,018,472	76.4 %	4,100,470	98.0 %



Section VI – Accounting Information

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014.

	State Employees	Teachers	State Police	Judicial	Virginia Law Officers	Political Subdivisions
Valuation Date	6/30/2014	6/30/2014	6/30/2014	6/30/2014	6/30/2014	6/30/2014
Actuarial cost method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method*	Level percent, open	Level percent, open	Level percent, open	Level percent, open	Level percent, open	Level percent, open
Payroll Growth Rate	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Remaining amortization period	7 and Variable years*	7 and Variable years*	7 and Variable years*	7 and Variable years*	7 and Variable years*	Variable years*
Asset valuation method	5 year Smoothed Market	5 year Smoothed Market	5 year Smoothed Market	5 year Smoothed Market	5 year Smoothed Market	5 year Smoothed Market
Actuarial assumptions:						
Investment rate of return**	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Projected salary increases**	3.50 – 5.35%	3.50 – 5.95%	3.50 – 4.75%	4.50%	3.50 – 4.75%	3.50 – 5.35% General Employees 3.5% - 4.75% Public Safety
Post-Retirement Benefit Increases:	compounded annually	compounded annually	compounded annually	compounded annually	compounded annually	compounded annually
Plan 1	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Plan 2	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%

* For non political subdivisions:

The amortization period of the unfunded less the deferred contribution begins at 30 years on June 30, 2013 and will decrease by one each year until reaching 0 years. Each subsequent year a new base will be added to the unfunded accrued liability and will be amortized over a closed 20 year period. The deferred contribution, as defined under 2011 Appropriations Act, Item 469(l)(6), is to be amortized using a level-dollar, closed, 10 year period. See Schedule D for the Amortization Schedules showing each base comprising the unfunded accrued liability.

For political subdivisions:

The amortization period of the unfunded begins at 30 years on June 30, 2013 and will decrease by one each year until reaching 0 years. Each subsequent year a new base will be added to the unfunded accrued liability and will be amortized over a closed 20 year period.

** Includes inflation at 2.50%.



Section VI – Accounting Information

SCHEDULE OF ADOPTED EMPLOYER CONTRIBUTIONS

Fiscal Year End	ARC \$	ARC % (Percent of Payroll)	% of ARC Contributed	Statutory Required Contribution Paid \$	Statutory Required Contribution % (Percent of Payroll)	% Statutory Contribution Contributed
State						
2014	\$504,726	13.07%	67.02%	\$338,286	8.76%	100%
2013	485,577	13.07%	67.02%	325,452	8.76%	100%
2012	309,930	8.46%	37.98%	117,696	3.21%	100%
2011	294,363	8.46%	25.18%	74,113	2.13%	100%
2010	285,209	8.02%	61.97%	176,751	6.26%	100%
Teachers						
2014	\$1,226,394	16.77%	69.53%	\$852,699	11.66%	100%
2013	1,203,856	16.77%	69.53%	837,028	11.66%	100%
2012	903,655	12.91%	49.03%	443,078	6.33%	100%
2011	891,237	12.91%	30.44%	271,306	3.93%	100%
2010	839,550	11.84%	53.63%	450,218	8.81%	100%
State Police						
2014	\$36,538	32.62%	75.84%	\$27,711	24.74%	100%
2013	34,535	32.62%	75.84%	26,193	24.74%	100%
2012	26,250	25.56%	43.58%	11,441	11.09%	100%
2011	24,570	25.56%	30.36%	7,460	7.76%	100%
2010	23,791	24.09%	66.05%	15,714	20.05%	100%
Judicial						
2014	\$33,018	54.11%	83.98%	\$27,728	45.44%	100%
2013	32,185	54.11%	83.98%	27,028	45.44%	100%
2012	27,631	46.79%	68.43%	18,907	32.13%	100%
2011	28,101	46.79%	61.57%	17,303	28.81%	100%
2010	23,638	38.04%	72.20%	17,065	34.51%	100%
Virginia Law Officers						
2014	\$68,806	19.52%	75.82%	\$52,169	14.80%	100%
2013	66,463	19.52%	75.82%	50,392	14.80%	100%
2012	55,306	15.93%	44.27%	24,481	7.08%	100%
2011	53,686	15.93%	32.14%	17,255	5.12%	100%
2010	57,894	16.78%	67.41%	39,027	14.23%	100%

Reported in the Comprehensive Annual Financial Report as a percentage of Covered Payroll, including revisions adopted by the General Assembly of the actuarially determined rates. The statutory required contribution percentages for the fiscal year ending in 2012 are a blend of a rate payable for nine months and three months at another rate.



Section VII – Derivation of Experience Gains and Losses

**CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)
DURING FISCAL YEAR 2014
(\$ IN THOUSANDS)**

	State Employees	Teachers	State Police	Judicial	Virginia Law Officers	Political Subdivisions	Total
A. Calculation of Expected Unfunded Actuarial Accrued Liability							
1. UAAL as of June 30, 2013	\$ 7,354,247	\$ 15,127,655	\$ 404,707	\$ 221,955	\$ 800,177	\$ 4,473,029	\$28,381,770
2. Normal Cost for previous year	344,972	777,103	17,141	22,452	43,462	490,428	1,695,559
3. Actual contributions during the year	(541,417)	(1,225,092)	(48,329)	(30,778)	(85,391)	(765,041)	(2,696,048)
4. Interest at previous year's rate of 0.07							
a. on UAAL	514,797	1,058,936	28,329	15,537	56,012	313,112	1,986,723
b. on normal cost	24,148	54,397	1,200	1,572	3,042	34,330	118,689
c. on contributions	(18,950)	(42,878)	(1,692)	(1,077)	(2,989)	(26,776)	(94,362)
d. total: (a)+(b)+(c)	\$ 519,995	\$ 1,070,455	\$ 27,837	\$ 16,032	\$ 56,065	\$ 320,666	\$ 2,011,050
5. Expected UAAL as of June 30, 2014 A1+A2+A3+A4	7,677,797	15,750,121	401,356	229,661	814,313	4,519,082	29,392,330
6. Actual UAAL as of June 30, 2014	6,996,728	14,271,093	366,911	202,116	762,035	3,670,996	26,269,879
7. Total Gain/(Loss): A5-A6	\$ 681,069	\$ 1,479,028	\$ 34,445	\$ 27,545	\$ 52,278	\$ 848,086	\$ 3,122,451
B. Calculation of Asset Gain/(Loss)							
1. Actuarial Value of Assets (AVA) as of June 30, 2013	\$13,714,404	\$ 24,724,679	\$ 591,983	\$ 368,671	\$ 941,933	\$13,685,498	\$54,027,168
2. Contributions during the year	\$ 541,417	\$ 1,225,092	\$ 48,329	\$ 30,778	\$ 85,391	\$ 765,041	\$ 2,696,048
3. Benefit payments during the year	(1,106,902)	(1,910,739)	(51,152)	(37,984)	(83,077)	(791,582)	(3,981,436)
4. Interest at previous year's rate of 0.07							
a. on AVA at beginning of year	\$ 960,008	\$ 1,730,728	\$ 41,439	\$ 25,807	\$ 65,935	\$ 957,985	\$ 3,781,902
b. on contributions	18,950	42,878	1,692	1,077	2,989	26,776	94,362
c. on benefit payments	(38,742)	(66,876)	(1,790)	(1,329)	(2,908)	(27,705)	(139,350)
d. total: (a)+(b)+(c)	\$ 940,216	\$ 1,706,730	\$ 41,341	\$ 25,555	\$ 66,016	\$ 957,056	\$ 3,736,914
5. Expected AVA as of June 30, 2014 B1+B2+B3+B4	14,089,135	25,745,762	630,501	387,020	1,010,263	14,616,013	56,478,694
6. Actual AVA as of June 30, 2014	14,826,208	27,026,576	662,244	406,053	1,058,010	15,291,783	59,270,874
7. Gain/(Loss) on assets: B6-B5	\$ 737,073	\$ 1,280,814	\$ 31,743	\$ 19,033	\$ 47,747	\$ 675,770	\$ 2,792,180
C. Calculation of Liability Gain/(Loss)							
1. Gain/(Loss) due to changes in actuarial assumptions	0	0	0	0	0	0	0
2. Gain/(Loss) due to plan amendments	0	0	0	0	0	(1,135)	(1,135)
3. Gain/(Loss) due to change in methods	0	0	0	0	0	0	0
4. Liability Experience Gain/(Loss): A7-B7-C1-C2-C3	\$ (56,004)	\$ 198,214	\$ 2,702	\$ 8,512	\$ 4,531	\$ 173,451	\$ 331,406



Section VII – Derivation of Experience Gains and Losses

**GAINS & LOSSES
DURING FISCAL YEAR 2014
(\$ IN MILLIONS)**

Type of Activity	State Employees	Teachers	State Police	Judges	Virginia Law Officers	Political Subdivisions
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$39.6	\$122.4	\$8.1	\$10.3	(\$3.1)	(\$48.5)
Disability Before Retirement. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(\$12.7)	\$0.3	\$0.2	\$1.4	(\$0.2)	\$22.8
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	\$1.8	(\$4.4)	\$0.3	\$0.2	\$0.8	\$18.4
Withdrawal from Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(\$40.5)	(\$117.6)	(\$0.3)	\$0.0	(\$1.1)	(\$17.6)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(\$116.5)	\$86.2	(\$3.8)	\$2.4	(\$7.1)	\$52.2
New Members. Additional unfunded accrued liability will produce a loss.	(\$5.5)	(\$28.7)	\$0.0	(\$1.0)	(\$0.5)	(\$10.4)
Death after Retirement. If retirees live longer than assumed, there is a loss. If not as long, a gain.	\$1.6	(\$23.5)	(\$4.2)	(\$1.9)	\$6.4	\$98.9
Data and Other Adjustments.	(\$37.1)	(\$39.5)	(\$1.2)	(\$5.7)	\$3.0	(\$25.7)
Benefit Payments. If benefit payments are greater than expected, there is a loss. If the benefits payments are less, a gain.	\$2.0	(\$9.1)	(\$1.8)	(\$0.8)	(\$1.9)	\$5.2
Cost of Living Allowance (COLA). If COLA is greater than expected, there is a loss. If COLA is less, a gain.	\$111.3	\$212.1	\$5.4	\$3.6	\$8.3	\$78.7
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	\$737.1	\$1,280.8	\$31.7	\$19.0	\$47.7	\$675.8
Gain or (Loss) During Year	\$681.1	\$1,479.0	\$34.4	\$27.5	\$52.3	\$849.8
Non-Recurring Items. Adjustments for plan amendments, assumption changes, etc.	0.0	0.0	0.0	0.0	0.0	(\$1.1)
Expected Contributions vs. Actual Contributions. If the difference in the actual contribution to the plan is more or less than what was expected based on the previous valuation then there will be a gain or loss associated with this difference.	(266.5)	(521.1)	5.8	(6.5)	(9.5)	\$3.2
Total Gain or (Loss) During Year	\$414.6	\$957.9	\$40.2	\$21.0	\$42.8	\$851.9



Schedule A – Balance Sheet

STATE EMPLOYEES
As of June 30, 2014

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Assets		\$ 14,826,208,000
Present value of future members' contributions		1,265,824,034
Present value of future employer contributions		
Normal contributions	\$ 1,292,665,941	
Unfunded accrued liability contributions	<u>6,996,727,777</u>	
Total prospective employer contributions		<u>8,289,393,718</u>
Total Present and Prospective Assets		<u>\$ 24,381,425,752</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 11,418,799,964
Present value of prospective benefits payable on account of inactive members		1,014,549,401
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$10,860,796,257	
Disability retirement benefits	540,137,884	
Survivor benefits	261,556,123	
Separation benefits	<u>285,586,123</u>	
Total		<u>11,948,076,387</u>
Total Actuarial Liabilities		<u>\$ 24,381,425,752</u>



Schedule A – Balance Sheet

TEACHERS
As of June 30, 2014

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Assets		\$ 27,026,576,000
Present value of future members' contributions		3,024,110,047
Present value of future employer contributions		
Normal contributions	\$ 3,853,298,518	
Unfunded accrued liability contributions	<u>14,271,093,440</u>	
Total prospective employer contributions		<u>18,124,391,958</u>
Total Present and Prospective Assets		<u>\$ 48,175,078,005</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 21,754,563,411
Present value of prospective benefits payable on account of inactive members		965,811,510
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 23,802,895,894	
Disability retirement benefits	581,268,545	
Survivor benefits	305,269,833	
Separation benefits	<u>765,268,812</u>	
Total		<u>25,454,703,084</u>
Total Actuarial Liabilities		<u>\$ 48,175,078,005</u>



Schedule A – Balance Sheet

STATE POLICE
As of June 30, 2014

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Assets		\$ 662,244,000
Present value of future members' contributions		43,797,912
Present value of future employer contributions		
Normal contributions	\$ 109,131,735	
Unfunded accrued liability contributions	<u>366,911,339</u>	
Total prospective employer contributions		<u>476,043,074</u>
Total Present and Prospective Assets		<u>\$ 1,182,084,986</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 543,351,529
Present value of prospective benefits payable on account of inactive members		19,061,334
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 559,166,502	
Disability retirement benefits	22,045,491	
Survivor benefits	13,862,770	
Separation benefits	<u>24,597,360</u>	
Total		<u>619,672,123</u>
Total Actuarial Liabilities		<u>\$ 1,182,084,986</u>



Schedule A – Balance Sheet

JUDICIAL
As of June 30, 2014

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Assets	\$	406,053,000
Present value of future members' contributions		16,952,872
Present value of future employer contributions		
Normal contributions	\$ 110,288,160	
Unfunded accrued liability contributions	<u>202,116,059</u>	
Total prospective employer contributions		<u>312,404,219</u>
Total Present and Prospective Assets	\$	<u><u>735,410,091</u></u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits	\$	367,781,777
Present value of prospective benefits payable on account of inactive members		2,482,850
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 344,522,695	
Disability retirement benefits	12,925,592	
Survivor benefits	7,697,177	
Separation benefits	<u>-</u>	
Total		<u>365,145,464</u>
Total Actuarial Liabilities	\$	<u><u>735,410,091</u></u>



Schedule A – Balance Sheet

VIRGINIA LAW OFFICERS
As of June 30, 2014

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Assets		\$ 1,058,010,000
Present value of future members' contributions		97,990,582
Present value of future employer contributions		
Normal contributions	\$ 182,000,549	
Unfunded accrued liability contributions	<u>762,035,228</u>	
Total prospective employer contributions		<u>944,035,777</u>
Total Present and Prospective Assets		<u>\$ 2,100,036,359</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 863,399,413
Present value of prospective benefits payable on account of inactive members		114,448,975
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 918,133,767	
Disability retirement benefits	69,205,024	
Survivor benefits	21,690,465	
Separation benefits	<u>113,158,715</u>	
Total		<u>1,122,187,971</u>
Total Actuarial Liabilities		<u>\$ 2,100,036,359</u>



Schedule A – Balance Sheet

POLITICAL SUBDIVISIONS

As of June 30, 2014

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Assets		\$ 15,291,783,352
Present value of future members' contributions		1,565,758,906
Present value of future employer contributions		
Normal contributions	\$ 2,337,438,641	
Unfunded accrued liability contributions	<u>3,670,996,116</u>	
Total prospective employer contributions		<u>6,008,434,757</u>
Total Present and Prospective Assets		<u><u>\$ 22,865,977,015</u></u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 8,231,765,691
Present value of prospective benefits payable on account of inactive members		1,083,998,811
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$11,889,435,478	
Disability retirement benefits	730,283,089	
Survivor benefits	293,207,122	
Separation benefits	<u>637,286,824</u>	
Total		<u>13,550,212,513</u>
Total Actuarial Liabilities		<u><u>\$ 22,865,977,015</u></u>



Schedule A – Solvency Test

SOLVENCY TEST

Virginia Retirement System (State Employees, Teachers, and Political Subdivisions)
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$11,819,771	\$44,469,489	\$25,794,124	\$82,083,384	\$57,144,567	100.00%	100.00%	3.32%
6/30/2013	11,420,836	42,383,697	25,273,058	79,077,591	52,124,581	100.00	96.00	0.00
6/30/2012	9,479,988	39,996,442	28,382,426	77,858,856	51,211,915	100.00	100.00	6.11
6/30/2011	9,116,662	37,539,539	28,528,577	75,184,778	52,558,997	100.00	100.00	20.69
6/30/2010	9,246,421	35,117,915	28,436,065	72,800,401	52,728,575	100.00	100.00	29.41

State Employees Retirement System
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$3,202,604	\$12,433,349	\$6,186,983	\$21,822,936	\$14,826,208	100.00%	93.50%	0.00%
6/30/2013	3,113,926	11,954,023	6,000,702	21,068,651	13,714,404	100.00	88.70	0.00
6/30/2012	2,559,930	11,363,015	7,021,313	20,944,258	13,740,366	100.00	98.40	0.00
6/30/2011	2,475,123	10,844,164	7,088,671	20,407,958	14,406,275	100.00	100.00	15.33
6/30/2010	2,511,650	10,279,653	6,748,150	19,539,453	14,700,854	100.00	100.00	28.30



Schedule A – Solvency Test

Teachers Retirement System
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$5,494,752	\$22,720,375	\$13,082,542	\$41,297,669	\$27,026,576	100.00%	94.80%	0.00%
6/30/2013	5,310,701	21,627,490	12,914,143	39,852,334	24,724,679	100.00	89.80	0.00
6/30/2012	4,573,244	20,361,089	14,156,075	39,090,408	24,391,761	100.00	97.30	0.00
6/30/2011	4,394,657	19,066,272	14,310,803	37,771,732	25,166,124	100.00	100.00	11.92
6/30/2010	4,376,385	17,935,907	14,776,284	37,088,576	25,447,677	100.00	100.00	21.22

Political Subdivisions Retirement System
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$3,122,415	\$9,315,765	\$6,524,599	\$18,962,779	\$15,291,783	100.00%	100.00%	43.74%
6/30/2013	2,996,209	8,802,184	6,358,213	18,156,606	13,685,498	100.00	100.00	29.68
6/30/2012	2,346,814	8,272,338	7,205,038	17,824,190	13,079,788	100.00	100.00	34.15
6/30/2011	2,246,882	7,629,103	7,129,103	17,005,088	12,986,598	100.00	100.00	43.63
6/30/2010	2,358,386	6,902,355	6,911,631	16,172,372	12,580,044	100.00	100.00	48.02



Schedule A – Solvency Test

State Police Retirement System
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$92,637	\$562,413	\$374,105	\$1,029,155	\$662,244	100.00%	100.00%	1.92%
6/30/2013	88,814	548,115	359,761	996,690	591,983	100.00	91.80	0.00
6/30/2012	78,465	563,612	371,201	1,013,278	587,160	100.00	90.30	0.00
6/30/2011	74,943	540,097	370,664	985,704	616,603	100.00	100.00	0.42
6/30/2010	77,759	510,491	360,642	948,892	633,415	100.00	100.00	12.52

Judicial Retirement System
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$38,522	\$370,265	\$199,382	\$608,169	\$406,053	100.00%	99.30%	0.00%
6/30/2013	38,439	360,470	191,717	590,626	368,671	100.00	91.60	0.00
6/30/2012	38,578	335,501	208,377	582,456	361,097	100.00	96.10	0.00
6/30/2011	37,981	312,423	219,091	569,494	371,051	100.00	100.00	9.42
6/30/2010	43,217	310,305	206,398	559,920	372,096	100.00	100.00	9.00



Schedule A – Solvency Test

Virginia Law Officers Retirement System
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$230,522	\$977,848	\$611,675	\$1,820,045	\$1,058,010	100.00%	84.60%	0.00%
6/30/2013	223,467	916,886	601,757	1,742,110	941,933	100.00	78.40	0.00
6/30/2012	176,172	861,342	715,499	1,753,014	909,399	100.00	85.10	0.00
6/30/2011	174,963	763,631	744,597	1,683,191	926,082	100.00	98.40	0.00
6/30/2010	186,792	682,378	710,151	1,579,321	925,443	100.00	100.00	7.92

All Retirement Systems Combined
(\$ in thousands)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Total		(1)	(2)	(3)
6/30/2014	\$12,181,452	\$46,380,015	\$26,979,286	\$85,540,753	\$59,270,874	100.00%	100.00%	2.63%
6/30/2013	11,771,556	44,209,168	26,426,293	82,407,017	54,027,168	100.00	95.60	0.00
6/30/2012	9,773,203	41,756,897	29,677,503	81,207,603	53,069,571	100.00	100.00	5.19
6/30/2011	9,404,549	39,155,690	29,862,929	78,423,167	54,472,733	100.00	100.00	19.80
6/30/2010	9,554,189	36,621,088	29,713,256	75,888,534	54,659,529	100.00	100.00	28.55



Schedule B – Development of Actuarial Value of Assets

STATE EMPLOYEES
For the Year Ending June 30, 2014
(\$ in thousands)

(1)	Actuarial Value Beginning of Year	\$	13,714,404
(2)	Market Value End of Year	\$	16,168,535
(3)	Market Value Beginning of Year	\$	14,502,362
(4)	Cash Flow		
	a. Contributions	\$	541,294
	b. Benefit Payments		(1,106,902)
	c. Administrative Expenses		(12,341)
	d. Net Transfers		123
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(577,826)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	2,243,999
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	1,007,714
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	1,236,285
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	247,257
	b. First Prior Year		126,685
	c. Second Prior Year		(160,607)
	d. Third Prior Year		294,458
	e. Fourth Prior Year		174,123
	f. Total Recognized Investment Gain	\$	681,916
(7)	Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	14,826,208



Schedule B – Development of Actuarial Value of Assets

TEACHERS
For the Year Ending June 30, 2014
(\$ in thousands)

(1)	Actuarial Value Beginning of Year	\$	24,724,679
(2)	Market Value End of Year	\$	29,411,183
(3)	Market Value Beginning of Year	\$	26,076,425
(4)	Cash Flow		
	a. Contributions	\$	1,224,875
	b. Benefit Payments		(1,910,739)
	c. Administrative Expenses		(22,036)
	d. Net Transfers		217
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(707,683)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	4,042,441
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	1,823,388
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	2,219,053
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	443,811
	b. First Prior Year		220,918
	c. Second Prior Year		(281,225)
	d. Third Prior Year		509,063
	e. Fourth Prior Year		293,625
	f. Total Recognized Investment Gain	\$	1,186,192
(7)	Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	27,026,576



Schedule B – Development of Actuarial Value of Assets

STATE POLICE
For the Year Ending June 30, 2014
(\$ in thousands)

(1)	Actuarial Value Beginning of Year	\$	591,983
(2)	Market Value End of Year	\$	720,991
(3)	Market Value Beginning of Year	\$	625,562
(4)	Cash Flow		
	a. Contributions	\$	48,329
	b. Benefit Payments		(51,152)
	c. Administrative Expenses		(430)
	d. Net Transfers		-
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(3,253)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	98,682
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	44,120
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	54,562
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	10,912
	b. First Prior Year		5,418
	c. Second Prior Year		(6,852)
	d. Third Prior Year		12,548
	e. Fourth Prior Year		7,368
	f. Total Recognized Investment Gain	\$	29,394
(7)	Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	662,244



Schedule B – Development of Actuarial Value of Assets

JUDICIAL
For the Year Ending June 30, 2014
(\$ in thousands)

(1)	Actuarial Value Beginning of Year	\$	368,671
(2)	Market Value End of Year	\$	442,194
(3)	Market Value Beginning of Year	\$	388,835
(4)	Cash Flow		
	a. Contributions	\$	30,778
	b. Benefit Payments		(37,984)
	c. Administrative Expenses		(268)
	d. Net Transfers		-
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(7,474)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	60,833
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	27,234
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	33,599
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	6,720
	b. First Prior Year		3,365
	c. Second Prior Year		(4,093)
	d. Third Prior Year		7,353
	e. Fourth Prior Year		4,277
	f. Total Recognized Investment Gain	\$	17,622
(7)	Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	406,053



Schedule B – Development of Actuarial Value of Assets

VIRGINIA LAW OFFICERS
For the Year Ending June 30, 2014
(\$ in thousands)

(1)	Actuarial Value Beginning of Year	\$	941,933
(2)	Market Value End of Year	\$	1,150,450
(3)	Market Value Beginning of Year	\$	992,031
(4)	Cash Flow		
	a. Contributions	\$	85,391
	b. Benefit Payments		(83,077)
	c. Administrative Expenses		(681)
	d. Net Transfers		-
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	1,633
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	156,786
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	70,204
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	86,582
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	17,316
	b. First Prior Year		8,456
	c. Second Prior Year		(10,400)
	d. Third Prior Year		18,608
	e. Fourth Prior Year		10,260
	f. Total Recognized Investment Gain	\$	44,240
(7)	Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	1,058,010



Schedule B – Development of Actuarial Value of Assets

POLITICAL SUBDIVISIONS
For the Year Ending June 30, 2014
(\$ in thousands)

(1)	Actuarial Value Beginning of Year	\$	13,685,498
(2)	Market Value End of Year	\$	16,627,539
(3)	Market Value Beginning of Year	\$	14,393,949
(4)	Cash Flow		
	a. Contributions	\$	764,921
	b. Benefit Payments		(791,582)
	c. Administrative Expenses		(12,153)
	d. Net Transfers		120
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(38,694)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	2,272,284
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e – (4)c] x (5)b x 0.5] – (4)c	\$	1,018,800
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	1,253,484
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	250,697
	b. First Prior Year		122,308
	c. Second Prior Year		(146,376)
	d. Third Prior Year		258,796
	e. Fourth Prior Year		140,754
	f. Total Recognized Investment Gain	\$	626,179
(7)	Actuarial Value End of Year: (1) + (4) + (5)c + (6)f	\$	15,291,783



Schedule C – Summary of Changes in Net Assets

STATE EMPLOYEES
For the Year Ending June 30, 2014
(\$ in thousands)

Additions for the Year

Contributions:	
Members	\$ 197,923
Members (paid by employer)	112
Employers	<u>343,259</u>
Total	\$ 541,294
Miscellaneous Revenue	123
Net Investment Income	<u>2,243,999</u>
TOTAL	\$ <u>2,785,416</u>

Deductions for the Year

Benefit Payments	\$ 1,081,866
Refunds	25,036
Transfers	-
Administrative Expenses	<u>12,341</u>
TOTAL	\$ <u>1,119,243</u>

Excess of Additions Over Deductions \$ 1,666,173

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2013	\$ 14,502,362
Excess of Additions over Deductions	<u>1,666,173</u>
Market Value of Assets as of 6/30/2014*	<u>\$ 16,168,535</u>

*The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



Schedule C – Summary of Changes in Net Assets

TEACHERS
For the Year Ending June 30, 2014
(\$ in thousands)

Additions for the Year

Contributions:

Members	\$	312,485
Members (paid by employer)		58,756
Employers		<u>853,634</u>

Total \$ 1,224,875

Miscellaneous Revenue 217

Net Investment Income 4,042,441

TOTAL \$ 5,267,533

Deductions for the Year

Benefit Payments	\$	1,874,636
Refunds		36,103
Transfers		-
Administrative Expenses		<u>22,036</u>

TOTAL \$ 1,932,775

Excess of Additions Over Deductions \$ 3,334,758

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2013	\$	26,076,425
Excess of Additions over Deductions		<u>3,334,758</u>
Market Value of Assets as of 6/30/2014*	\$	<u><u>29,411,183</u></u>

*The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



Schedule C – Summary of Changes in Net Assets

STATE POLICE
For the Year Ending June 30, 2014
(\$ in thousands)

Additions for the Year

Contributions:	
Members	\$ 5,646
Members (paid by employer)	-
Employers	<u>42,683</u>
Total	\$ 48,329
Miscellaneous Revenue	-
Net Investment Income	<u>98,682</u>
TOTAL	\$ <u>147,011</u>

Deductions for the Year

Benefit Payments	\$ 50,467
Refunds	685
Transfers	-
Administrative Expenses	<u>430</u>
TOTAL	\$ <u>51,582</u>

Excess of Additions Over Deductions \$ 95,429

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2013	\$ 625,562
Excess of Additions over Deductions	<u>95,429</u>
Market Value of Assets as of 6/30/2014*	<u>\$ 720,991</u>

*The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



Schedule C – Summary of Changes in Net Assets

JUDICIAL
For the Year Ending June 30, 2014
(\$ in thousands)

Additions for the Year

Contributions:	
Members	\$ 2,724
Members (paid by employer)	327
Employers	<u>27,727</u>
Total	\$ 30,778
Miscellaneous Revenue	-
Net Investment Income	<u>60,833</u>
TOTAL	\$ <u>91,611</u>

Deductions for the Year

Benefit Payments	\$ 37,984
Refunds	-
Transfers	-
Administrative Expenses	<u>268</u>
TOTAL	\$ <u>38,252</u>

Excess of Additions Over Deductions \$ 53,359

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2013	\$ 388,835
Excess of Additions over Deductions	<u>53,359</u>
Market Value of Assets as of 6/30/2014*	<u>\$ 442,194</u>

*The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



Schedule C – Summary of Changes in Net Assets

VIRGINIA LAW OFFICERS
For the Year Ending June 30, 2014
(\$ in thousands)

Additions for the Year

Contributions:

Members	\$	-
Members (paid by employer)		17,908
Employers		<u>67,483</u>

Total \$ 85,391

Miscellaneous Revenue -

Net Investment Income 156,786

TOTAL \$ 242,177

Deductions for the Year

Benefit Payments	\$	78,412
Refunds		4,665
Transfers		-
Administrative Expenses		<u>681</u>

TOTAL \$ 83,758

Excess of Additions Over Deductions \$ 158,419

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2013	\$	992,031
Excess of Additions over Deductions		158,419
Market Value of Assets as of 6/30/2014*	\$	<u><u>1,150,450</u></u>

*The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



Schedule C – Summary of Changes in Net Assets

POLITICAL SUBDIVISIONS
For the Year Ending June 30, 2014
(\$ in thousands)

Additions for the Year

Contributions:	
Members	\$ 190,955
Members (paid by employer)	34,600
Employers	<u>539,366</u>
Total	\$ 764,921
Miscellaneous Revenue	120
Net Investment Income	<u>2,272,284</u>
TOTAL	\$ 3,037,325

Deductions for the Year

Benefit Payments	\$ 754,706
Refunds	36,876
Transfers	-
Administrative Expenses	<u>12,153</u>
TOTAL	\$ <u>803,735</u>

Excess of Additions Over Deductions \$ 2,233,590

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2013	\$ 14,393,949
Excess of Additions over Deductions	<u>2,233,590</u>
Market Value of Assets as of 6/30/2014*	\$ 16,627,539

*The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



Schedule D – Amortization Schedules Unfunded Accrued Liability

STATE EMPLOYEES
As of June 30, 2014

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance as of June 30, 2013</u>	<u>BOY 2013/2014 Amortization Payment</u>	<u>Outstanding Balance as of June 30, 2014</u>	<u>BOY 2014/2015 Amortization Payment</u>	<u>Years Remaining June 30, 2014</u>
2013 Original Unfunded	\$7,117,727,223	\$7,117,727,223	\$390,645,428	\$7,197,977,521	\$402,364,791	29 years
2014 Experience (Gain) / Loss	(\$414,716,278)			(\$414,716,278)	(\$29,072,539)	20 years
2011 10 Yr Payback of Contribution Deficit	\$278,155,318	\$236,519,567	\$37,018,133	\$213,466,534	\$37,018,133	7 years
Total		\$7,354,246,790	\$427,663,561	\$6,996,727,777	\$410,310,385	

<u>Date</u>	<u>Projected Unfunded Liability</u>
June 30, 2014	\$6,996,727,777
June 30, 2015	\$7,047,466,609
June 30, 2016	\$7,089,774,479
June 30, 2017	\$7,122,701,737
June 30, 2044	\$0



Schedule D – Amortization Schedules Unfunded Accrued Liability

TEACHERS
As of June 30, 2014

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance as of June 30, 2013</u>	<u>BOY 2013/2014 Amortization Payment</u>	<u>Outstanding Balance as of June 30, 2014</u>	<u>BOY 2014/2015 Amortization Payment</u>	<u>Years Remaining June 30, 2014</u>
2013 Original Unfunded	\$14,493,629,234	\$14,493,629,234	\$795,460,379	\$14,657,040,675	\$819,324,191	29 years
2014 Experience (Gain) / Loss	(\$958,176,017)			(\$958,176,017)	(\$67,170,283)	20 years
2011 10 Yr Payback of Contribution Deficit	\$741,432,106	\$634,025,864	\$99,232,610	\$572,228,782	\$99,232,610	7 years
Total		\$15,127,655,098	\$894,692,989	\$14,271,093,440	\$851,386,518	

<u>Date</u>	<u>Projected Unfunded Liability</u>
June 30, 2014	\$14,271,093,440
June 30, 2015	\$14,359,086,407
June 30, 2016	\$14,429,094,741
June 30, 2017	\$14,479,135,193
June 30, 2044	\$0



Schedule D – Amortization Schedules Unfunded Accrued Liability

STATE POLICE
As of June 30, 2014

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance as of June 30, 2013</u>	<u>BOY 2013/2014 Amortization Payment</u>	<u>Outstanding Balance as of June 30, 2014</u>	<u>BOY 2014/2015 Amortization Payment</u>	<u>Years Remaining June 30, 2014</u>
2013 Original Unfunded	\$385,000,723	\$385,000,723	\$21,130,168	\$389,341,494	\$21,764,073	29 years
2014 Experience (Gain) / Loss	(\$25,215,304)			(\$25,215,304)	(\$1,767,649)	20 years
2011 10 Yr Payback of Contribution Deficit	\$23,086,069	\$19,705,832	\$3,084,198	\$2,785,149	\$482,984	7 years
Total		\$404,706,555	\$24,214,366	\$366,911,339	\$20,479,408	

<u>Date</u>	<u>Projected Unfunded Liability</u>
June 30, 2014	\$366,911,339
June 30, 2015	\$370,682,166
June 30, 2016	\$374,075,066
June 30, 2017	\$377,044,326
June 30, 2044	\$0



Schedule D – Amortization Schedules Unfunded Accrued Liability

JUDICIAL
As of June 30, 2014

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance as of June 30, 2013</u>	<u>BOY 2013/2014 Amortization Payment</u>	<u>Outstanding Balance as of June 30, 2014</u>	<u>BOY 2014/2015 Amortization Payment</u>	<u>Years Remaining June 30, 2014</u>
2013 Original Unfunded	\$209,625,821	\$209,625,821	\$11,504,988	\$211,989,291	\$11,850,138	29 years
2014 Experience (Gain) / Loss	(\$21,000,605)			(\$21,000,605)	(\$1,472,189)	20 years
2011 10 Yr Payback of Contribution Deficit	\$14,585,278	\$12,329,059	\$1,929,645	\$11,127,373	\$1,929,645	7 years
Total		\$221,954,880	\$13,434,633	\$202,116,059	\$12,307,594	

<u>Date</u>	<u>Projected Unfunded Liability</u>
June 30, 2014	\$202,116,059
June 30, 2015	\$203,095,058
June 30, 2016	\$203,809,455
June 30, 2017	\$204,230,733
June 30, 2044	\$0



Schedule D – Amortization Schedules Unfunded Accrued Liability

VIRGINIA LAW OFFICERS
As of June 30, 2014

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance as of June 30, 2013</u>	<u>BOY 2013/2014 Amortization Payment</u>	<u>Outstanding Balance as of June 30, 2014</u>	<u>BOY 2014/2015 Amortization Payment</u>	<u>Years Remaining June 30, 2014</u>
2013 Original Unfunded	\$759,539,883	\$759,539,883	\$41,686,169	\$768,103,474	\$42,936,755	29 years
2014 Experience (Gain) / Loss	(\$27,744,710)			(\$27,744,710)	(\$1,944,966)	20 years
2011 10 Yr Payback of Contribution Deficit	\$48,155,379	\$40,637,290	\$6,360,221	\$21,676,464	\$3,759,007	7 years
Total		\$800,177,173	\$48,046,390	\$762,035,228	\$44,750,796	

<u>Date</u>	<u>Projected Unfunded Liability</u>
June 30, 2014	\$762,035,228
June 30, 2015	\$767,494,342
June 30, 2016	\$772,019,759
June 30, 2017	\$775,506,643
June 30, 2044	\$0



Schedule E – Outline of Actuarial Assumptions and Methods

Assumptions and Methods which apply to all VRS Plans

Investment Return Rate:	7.00% per annum, compounded annually (net of administrative expenses).
Inflation Assumption:	2.50% per year.
Actuarial Cost Method:	Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. See Schedule F for a detailed explanation.
Funding Period:	The legacy unfunded actuarial accrued liability less the deferred contribution as of June 30, 2013 is amortized over a closed 30 year period from June 30, 2013. The amortization period of the unfunded less the deferred contribution, will decrease by one each year until reaching 0 years. The deferred contribution, as defined under 2011 Appropriations Act, Item 469(l)(6), is to be amortized using a level-dollar, closed 10 year period beginning June 30, 2011. The actuarial gains and losses and other changes in the unfunded due to benefit and actuarial assumption and method changes for each valuation subsequent to the June 30, 2013 valuation will be amortized over a closed 20 year period. See the Amortization Schedules for more detail.
Payroll Growth Rate:	3% per annum.
Asset Valuation Method:	The method of valuing assets is intended to recognize a “smoothed” market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a five-year period. The resulting actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.
Cost-of-living Increase:	2.5% per year compounded annually for Plan 1 members receiving benefits or vested as of January 1, 2013 and 2.25% compounded annually for all other members. The temporary supplement for SPORS and VaLORS members is assumed to be adjusted biennially based on increases of 2.5% per annum compounded annually.
Percent Electing a Deferred Termination Benefit:	Terminating members are assumed to elect a return of contributions or a deferred annuity, whichever is most valuable benefit at the time of termination. Termination benefits are assumed to commence at normal retirement age.
Marriage Assumption:	100% of active employees are assumed to be married, with spouses the same age as participants.
Plan 1:	Members hired prior to July 1, 2010 and who were vested as of January 1, 2013.



Schedule E – Outline of Actuarial Assumptions and Methods

- Plan 2:** Members hired on or after July 1, 2010 but before January 1, 2014, or members hired prior to July 1, 2010 and who were not vested as of January 1, 2013. Members hired after January 1, 2014 in the State Police and Virginia Law Officers Plans are in Plan 2.
- Hybrid:** Members hired on or after January 1, 2014 or by member election. There is no Hybrid Plan in the State Police and Virginia Law Officers Plans.
- Service Related Disability:** The service related disability benefits do not include an adjustment for Social Security or Worker's Compensation benefits.
- Hazardous Duty Service:** The valuations of SPORS and VaLORS assume that all VRS service is hazardous duty service for purposes of determining eligibility for the temporary supplement.



Schedule E – State Employees’ Actuarial Assumptions and Methods

STATE EMPLOYEES
Plan Specific Assumptions and Methods

MORTALITY RATES:

Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set forward 2 years and Females set back 3 years.

Post-Retirement:

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with Females set back 1 year.

Post-Disablement:

RP-2000 Disabled Life Mortality Table with Males set back 3 years and no provision for future mortality improvement.

Mortality Rates						
Age	Male			Female		
	Pre Retirement	Post Retirement	Post Disablement	Pre Retirement	Post Retirement	Post Disablement
20	0.00026	0.00024	0.00000	0.00014	0.00014	0.00000
25	0.00035	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00051	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00082	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00099	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00128	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00163	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00258	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00437	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00662	0.00961	0.04498	0.00421	0.00780	0.02803
70	0.00703	0.01641	0.05445	0.00562	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

14% of pre-retirement deaths are assumed to be service related. Mortality improvement is anticipated under the post-retirement mortality assumption as projected with Scale AA.



Schedule E – State Employees’ Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire from Plan 1.

State Employees Retirement Rates, Plan 1				
Age	Males		Females	
	Years of Service			
	0-29	>=30	0-29	>=30
<=49	0.000	0.000	0.000	0.000
50	0.030	0.100	0.032	0.100
51	0.030	0.100	0.031	0.100
52	0.030	0.100	0.030	0.100
53	0.030	0.100	0.030	0.100
54	0.030	0.100	0.035	0.100
55	0.050	0.100	0.050	0.100
56	0.050	0.100	0.050	0.100
57	0.045	0.100	0.045	0.100
58	0.040	0.100	0.055	0.100
59	0.050	0.100	0.055	0.100
60	0.050	0.100	0.055	0.150
61	0.100	0.150	0.100	0.200
62	0.150	0.250	0.150	0.300
63	0.150	0.200	0.150	0.200
64	0.150	0.200	0.150	0.200
65	0.300	0.300	0.300	0.400
66	0.300	0.250	0.300	0.300
67	0.300	0.250	0.300	0.250
68	0.300	0.200	0.300	0.250
69	0.300	0.200	0.300	0.200
>=70	1.000	1.000	1.000	1.000



Schedule E – State Employees’ Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire from Plan 2 and the Hybrid Plan.

State Employees Retirement Rates, Plan 2 & Hybrid														
Age	Males													
	Years of Service													
	0-4	5-26 *	27-28 *	29-30 *	31	32	33	34	35	36	37	38	39	>=40
<=49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100
57	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100	0.100
58	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
59	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
60	0.000	0.050	0.050	0.050	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
61	0.000	0.100	0.100	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150
62	0.000	0.150	0.150	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
63	0.000	0.150	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
64	0.000	0.150	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
65	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
66	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.250
67	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.250
68	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.200
69	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.200
>=70	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Rate is 35% when age plus service equals 90.



Schedule E – State Employees’ Actuarial Assumptions and Methods

State Employees Retirement Rates, Plan 2 & Hybrid															
Age	Females														
	Years of Service														
	0-4	5-25 *	26-27 *	28-29 *	30	31	32	33	34	35	36	37	38	39	>=40
<=49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100	0.100
58	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
59	0.000	0.000	0.000	0.000	0.000	0.350	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
60	0.000	0.055	0.055	0.055	0.350	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150
61	0.000	0.100	0.100	0.100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
62	0.000	0.150	0.150	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
63	0.000	0.150	0.150	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
64	0.000	0.150	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
65	0.000	0.300	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
66	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
67	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.250
68	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.250
69	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.200
>=70	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Rate is 35% when age plus service equals 90.



Schedule E – State Employees’ Actuarial Assumptions and Methods

DISABILITY RATES: As shown below for selected ages. 14% of disability cases are assumed to be service related.

State Employees Disability Rates		
Age	Male	Female
20	0.00090	0.00010
25	0.00090	0.00100
30	0.00180	0.00150
35	0.00180	0.00250
40	0.00180	0.00290
45	0.00360	0.00340
50	0.00450	0.00550
55	0.00540	0.00810
60	0.00720	0.01000
65	0.00630	0.00900
70	0.00630	0.00000



Schedule E – State Employees’ Actuarial Assumptions and Methods

TERMINATION RATES: The following are sample withdrawal rates based on age and years of service (for causes other than death, disability, or retirement).

State Employees Rates of Termination, Plan 1								
Age	Male				Female			
	Years of Service							
	0-2	3-4	5-9	>=10	0-2	3-4	5-9	>=10
20	0.245	0.175	0.175	0.000	0.283	0.198	0.198	0.000
25	0.221	0.130	0.130	0.000	0.256	0.157	0.157	0.000
30	0.199	0.110	0.110	0.050	0.212	0.130	0.130	0.060
35	0.167	0.093	0.093	0.045	0.178	0.110	0.110	0.050
40	0.145	0.075	0.075	0.034	0.155	0.090	0.090	0.036
45	0.129	0.070	0.070	0.023	0.139	0.074	0.074	0.025
50	0.115	0.061	0.061	0.000	0.130	0.063	0.063	0.000
55	0.102	0.060	0.060	0.000	0.125	0.860	0.000	0.000
60	0.106	0.070	0.000	0.000	0.123	0.070	0.000	0.000
65	0.113	0.110	0.000	0.000	0.140	0.120	0.000	0.000
70	0.131	0.140	0.000	0.000	0.249	0.140	0.000	0.000

State Employees Rates of Termination, Plan 2 & Hybrid								
Age	Male				Female			
	Years of Service							
	0-2	3-4	5-9	>=10	0-2	3-4	5-9	>=10
20	0.245	0.175	0.175	0.000	0.283	0.198	0.198	0.000
25	0.221	0.130	0.130	0.000	0.256	0.157	0.157	0.000
30	0.199	0.110	0.110	0.050	0.212	0.130	0.130	0.060
35	0.167	0.093	0.093	0.045	0.178	0.110	0.110	0.050
40	0.145	0.075	0.075	0.034	0.155	0.090	0.090	0.036
45	0.129	0.070	0.070	0.023	0.139	0.074	0.074	0.025
50	0.115	0.061	0.061	0.020	0.130	0.063	0.063	0.020
55	0.102	0.060	0.060	0.004	0.125	0.060	0.060	0.004
60	0.106	0.070	0.000	0.000	0.123	0.070	0.000	0.000
65	0.113	0.110	0.000	0.000	0.140	0.120	0.000	0.000
70	0.131	0.140	0.000	0.000	0.249	0.140	0.000	0.000



Schedule E – State Employees’ Actuarial Assumptions and Methods

SALARY INCREASE RATES: The following total salary increase rates are used. The total salary increase rate consists of an inflation rate of 2.50%, a productivity component of 1.00%, and a variable merit component that is dependent on years of service.

Pay Increase Assumption	
Years of Service	Total Increase (Next Year)
1	5.35%
2	5.35
3	4.75
4	4.45
5	4.45
6	4.45
7	4.35
8	4.25
9	4.00
10	4.00
11-19	3.65
20 or more	3.50

DISABILITY ELECTION: All active members hired on or after January 1, 1999 will enter the Virginia Sickness and Disability Program (VSDP) and will not be eligible to receive non-VSDP disability benefits. For members hired before January 1, 1999 we measure the liabilities based upon the member’s actual election contained in the valuation data.

EMPLOYER CONTRIBUTION TO DEFINED CONTRIBUTION HYBRID PLAN: The valuation assumes an average employer defined contribution rate of 1.12% for members in the Hybrid Plan as reported by VRS.



Schedule E – Teachers’ Actuarial Assumptions and Methods

TEACHERS
Plan Specific Assumptions and Methods

MORTALITY RATES:

Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set back 3 years and Females set back 5 years.

Post-Retirement:

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with Males set back 2 years and Females set back 3 years.

Post-Disablement:

RP-2000 Disabled Life Mortality Table Projected to 2020 with Males set back 1 year and no provision for future mortality improvement.

Mortality Rates						
Age	Male			Female		
	Pre Retirement	Post Retirement	Post Disablement	Pre Retirement	Post Retirement	Post Disablement
20	0.00021	0.00022	0.00000	0.00012	0.00014	0.00000
25	0.00026	0.00028	0.01737	0.00014	0.00014	0.00562
30	0.00035	0.00036	0.02042	0.00016	0.00018	0.00609
35	0.00051	0.00057	0.02042	0.00022	0.00030	0.00597
40	0.00082	0.00086	0.01961	0.00038	0.00043	0.00551
45	0.00099	0.00104	0.01773	0.00052	0.00063	0.00540
50	0.00128	0.00135	0.01965	0.00081	0.00092	0.00819
55	0.00163	0.00195	0.02280	0.00119	0.00152	0.01409
60	0.00258	0.00382	0.02946	0.00215	0.00315	0.01976
65	0.00437	0.00755	0.03644	0.00356	0.00602	0.02535
70	0.00000	0.01348	0.04497	0.00000	0.01100	0.03405
75		0.02246	0.05729		0.01832	0.04448
80		0.04094	0.08287		0.02964	0.06283
85		0.07640	0.11724		0.04892	0.08884
90		0.13623	0.15309		0.08892	0.13188

5% of pre-retirement deaths are assumed to be service related. Mortality improvement is anticipated under the post-retirement mortality assumption as projected with Scale AA.



Schedule E – Teachers’ Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire from Plan 1.

Teachers Rates of Retirement, Plan 1				
Age	Male		Female	
	Years of Service			
	0-29	>=30	0-29	>=30
<=49	0.000	0.000	0.000	0.000
50	0.020	0.175	0.020	0.150
51	0.020	0.175	0.024	0.150
52	0.020	0.175	0.027	0.150
53	0.023	0.175	0.024	0.150
54	0.040	0.175	0.037	0.150
55	0.057	0.225	0.061	0.225
56	0.046	0.225	0.054	0.225
57	0.045	0.225	0.057	0.225
58	0.066	0.225	0.062	0.225
59	0.070	0.225	0.075	0.225
60	0.075	0.225	0.085	0.225
61	0.110	0.300	0.120	0.300
62	0.170	0.350	0.170	0.350
63	0.140	0.350	0.160	0.350
64	0.180	0.300	0.165	0.350
65	0.300	0.400	0.300	0.350
66	0.300	0.400	0.300	0.350
67	0.300	0.400	0.300	0.350
68	0.300	0.400	0.300	0.350
69	0.300	0.400	0.300	0.350
>=70	1.000	1.000	1.000	1.000



Schedule E – Teachers’ Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire from Plan 2 and the Hybrid Plan.

Teachers Retirement Rates, Plan 2 & Hybrid																	
Males																	
Age	Years of Service																
	0-4	5-21 *	22-23 *	24-25 *	26-27 *	28-29 *	30	31	32	33	34	35	36	37	38	39	>=40
<=49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.175
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.175	0.175
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.175	0.175	0.175
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.175	0.175	0.175	0.175
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.225	0.225	0.225	0.225	0.225
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.225	0.225	0.225	0.225	0.225	0.225
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.225	0.225	0.225	0.225	0.225	0.225	0.225
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
60	0.000	0.075	0.075	0.075	0.075	0.075	0.400	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
61	0.000	0.110	0.110	0.110	0.110	0.110	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
62	0.000	0.170	0.170	0.170	0.170	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350
63	0.000	0.140	0.140	0.140	0.140	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350
64	0.000	0.180	0.180	0.180	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
65	0.000	0.300	0.300	0.300	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
66	0.000	0.300	0.300	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
67	0.000	0.300	0.300	0.400	0.400	0.400	0.300	0.300	0.300	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
68	0.000	0.300	0.400	0.400	0.400	0.400	0.300	0.300	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
69	0.000	0.300	0.400	0.400	0.400	0.400	0.300	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
>=70	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Rate is 40% when age plus service equals 90.



Schedule E – Teachers’ Actuarial Assumptions and Methods

Teachers Retirement Rates, Plan 2 & Hybrid																		
Females																		
Age	Years of Service																	
	0-4	5-21 *	22	23	24-25 *	26-27 *	28-29 *	30	31	32	33	34	35	36	37	38	39	>=40
<=49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.150
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.150	0.150
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.150	0.150	0.150
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.150	0.150	0.150	0.150
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.225	0.225	0.225	0.225	0.225
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.225	0.225	0.225	0.225	0.225	0.225
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.225	0.225	0.225	0.225	0.225	0.225	0.225
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
60	0.000	0.085	0.085	0.085	0.085	0.085	0.085	0.350	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
61	0.000	0.120	0.120	0.120	0.120	0.120	0.120	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
62	0.000	0.170	0.170	0.170	0.170	0.170	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
63	0.000	0.160	0.160	0.160	0.160	0.160	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
64	0.000	0.165	0.165	0.165	0.165	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
65	0.000	0.300	0.300	0.300	0.400	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
66	0.000	0.300	0.300	0.400	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
67	0.000	0.300	0.400	0.350	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
68	0.000	0.300	0.350	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
69	0.000	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.350
>=70	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Rate is 35% when age plus service equals 90.



Schedule E – Teachers’ Actuarial Assumptions and Methods

DISABILITY RATES: As shown below for selected ages. 5% of disability cases are assumed to be service related.

Teachers Disability Rates		
Age	Male	Female
20	0.00000	0.00000
25	0.00008	0.00004
30	0.00010	0.00010
35	0.00018	0.00030
40	0.00021	0.00036
45	0.00099	0.00042
50	0.00133	0.00090
55	0.00195	0.00204
60	0.00308	0.00240
65	0.00276	0.00330
70	0.00169	0.00180



Schedule E – Teachers’ Actuarial Assumptions and Methods

TERMINATION RATES: The following are sample withdrawal rates based on age and years of service (for causes other than death, disability, or retirement).

Teachers Rates of Termination, Plan 1								
Age	Male				Female			
	Years of Service							
	0-2	3-4	5-9	>=10	0-2	3-4	5-9	>=10
20	0.182	0.143	0.143	0.008	0.159	0.160	0.160	0.000
25	0.154	0.118	0.118	0.008	0.146	0.120	0.120	0.150
30	0.149	0.090	0.090	0.037	0.164	0.110	0.110	0.047
35	0.141	0.073	0.073	0.031	0.149	0.090	0.090	0.039
40	0.141	0.070	0.070	0.025	0.127	0.075	0.075	0.028
45	0.147	0.075	0.075	0.019	0.117	0.064	0.064	0.021
50	0.138	0.070	0.070	0.000	0.118	0.058	0.058	0.000
55	0.143	0.070	0.000	0.000	0.124	0.058	0.000	0.000
60	0.166	0.080	0.000	0.000	0.129	0.077	0.000	0.000
65	0.170	0.083	0.000	0.000	0.130	0.080	0.000	0.000
70	0.170	0.083	0.000	0.000	0.130	0.080	0.000	0.000

Teachers Rates of Termination, Plan 2 & Hybrid								
Age	Male				Female			
	Years of Service							
	0-2	3-4	5-9	>=10	0-2	3-4	5-9	>=10
20	0.182	0.143	0.143	0.008	0.159	0.160	0.160	0.000
25	0.154	0.118	0.118	0.008	0.146	0.120	0.120	0.150
30	0.149	0.090	0.090	0.037	0.164	0.110	0.110	0.047
35	0.141	0.073	0.073	0.031	0.149	0.090	0.090	0.039
40	0.141	0.070	0.070	0.025	0.127	0.075	0.075	0.028
45	0.147	0.075	0.075	0.019	0.117	0.064	0.064	0.021
50	0.138	0.070	0.070	0.016	0.118	0.058	0.058	0.018
55	0.143	0.070	0.070	0.003	0.124	0.058	0.058	0.003
60	0.166	0.080	0.000	0.000	0.129	0.077	0.000	0.000
65	0.170	0.083	0.000	0.000	0.130	0.080	0.000	0.000
70	0.170	0.083	0.000	0.000	0.130	0.080	0.000	0.000



Schedule E – Teachers’ Actuarial Assumptions and Methods

SALARY INCREASE RATES: The following salary increase rates are used. Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown:

Pay Increase Assumption	
Years of Service	Total Increase (Next Year)
1	5.95%
2	5.85
3	5.85
4	5.45
5	5.45
6	5.45
7	5.35
8	5.35
9	5.35
10	4.85
11	4.85
12	4.85
13	4.75
14	4.75
15	4.65
16	4.65
17	4.55
18	4.45
19	4.45
20 or more	3.50

EMPLOYER CONTRIBUTION TO DEFINED CONTRIBUTION HYBRID PLAN: The valuation assumes an average employer defined contribution rate of 1.12% for members in the Hybrid Plan as reported by VRS.



Schedule E – State Police Actuarial Assumptions and Methods

**STATE POLICE
Plan Specific Assumptions and Methods**

MORTALITY RATES:

Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set forward 5 years and Females set back 3 years.

Post-Retirement:

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with Females set back 1 year.

Post-Disablement:

RP-2000 Disabled Life Mortality Table with Males set back 3 years and no provision for future mortality improvement.

Mortality Rates						
Age	Male			Female		
	Pre Retirement	Post Retirement	Post Disablement	Pre Retirement	Post Retirement	Post Disablement
20	0.00031	0.00024	0.00000	0.00014	0.00014	0.00000
25	0.00040	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00070	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00092	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00116	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00149	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00206	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00353	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00571	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00703	0.00961	0.04498	0.00421	0.00780	0.02803
70	1.00000	0.01641	0.05445	1.00000	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

60% of pre-retirement deaths are assumed to be service related. Mortality improvement is anticipated under the post-retirement mortality assumption as projected with Scale AA.



Schedule E – State Police Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire.

SPORS Rates of Retirement		
Age	Years of Service	
	Less Than 25	25 or More
<=49	0.000	0.000
50	0.100	0.150
51	0.100	0.150
52	0.100	0.150
53	0.100	0.150
54	0.100	0.150
55	0.100	0.150
56	0.100	0.150
57	0.100	0.150
58	0.120	0.200
59	0.120	0.200
60	0.250	0.400
61	0.350	0.400
62	0.500	1.000
63	0.500	1.000
>=64	1.000	1.000



Schedule E – State Police Actuarial Assumptions and Methods

DISABILITY RATES: As shown below for selected ages. 60% of disability cases are assumed to be service related.

SPORS Rates of Disability	
Age	Unisex
<=29	0.00000
30	0.00028
35	0.00134
40	0.00210
45	0.00411
50	0.00675
55	0.01001
60	0.00000

TERMINATION RATES: The following are sample withdrawal rates based on age and years of service (for causes other than death, disability, or retirement).

SPORS Rates of Termination								
Age	Males				Females			
	Years of Service							
	0-2	3-4	5-9	>=10	2	5	9	>=10
20	0.075	0.210	0.210	0.030	0.101	0.122	0.053	0.036
25	0.075	0.055	0.055	0.030	0.108	0.105	0.054	0.044
30	0.075	0.045	0.045	0.030	0.119	0.084	0.057	0.055
35	0.075	0.048	0.048	0.024	0.121	0.074	0.060	0.061
40	0.075	0.048	0.048	0.018	0.117	0.074	0.062	0.062
45	0.100	0.045	0.045	0.014	0.108	0.082	0.064	0.059
50	0.100	0.045	0.000	0.000	0.093	0.100	0.066	0.052
55	0.100	0.067	0.000	0.000	0.074	0.126	0.067	0.041
60	0.100	0.075	0.000	0.000	0.049	0.162	0.068	0.026
65	0.100	0.075	0.000	0.000	0.015	0.205	0.069	0.006
70	0.100	0.075	0.000	0.000	0.000	0.264	0.071	0.000



Schedule E – State Police Actuarial Assumptions and Methods

SALARY INCREASE RATES: The following salary increase rates are used. Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown:

Pay Increase Assumption	
Years of Service	Total Increase (Next Year)
1	4.75%
2	4.75
3	4.75
4	4.75
5	4.65
6	4.40
7	4.40
8	4.40
9	4.40
10 - 19	4.00
20 or more	3.50

It is assumed members covered under VSDP receive a 3.50% annual increase in pay while disabled and this adjusted pay is used to determine deferred benefits payable from the System.

DISABILITY ELECTION: All active members hired on or after January 1, 1999 will enter the Virginia Sickness and Disability Program (VSDP) and will not be eligible to receive non-VSDP disability benefits. For members hired before January 1, 1999 we measure the liabilities based upon the member's actual election contained in the valuation data.



Schedule E – Judicial Actuarial Assumptions and Methods

JUDICIAL
Plan Specific Assumptions and Methods

MORTALITY RATES:

Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set forward 2 years and Females set back 3 years.

Post-Retirement:

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with Females set back 1 year.

Post-Disablement:

RP-2000 Disabled Life Mortality Table with Males set back 3 years and no provision for future mortality improvement.

Mortality Rates						
Age	Male			Female		
	Pre Retirement	Post Retirement	Post Disablement	Pre Retirement	Post Retirement	Post Disablement
20	0.00026	0.00024	0.00000	0.00014	0.00014	0.00000
25	0.00035	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00051	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00082	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00099	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00128	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00163	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00258	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00437	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00662	0.00961	0.04498	0.00421	0.00780	0.02803
70	0.00703	0.01641	0.05445	0.00562	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

5% of pre-retirement deaths are assumed to be service related. Mortality improvement is anticipated under the post-retirement mortality assumption as projected with Scale AA.



Schedule E – Judicial Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire with an unreduced retirement benefit.

Judicial Rates of Retirement								
Age	Service Multiplier = 1.5				Service Multiplier = 2.0			
	Years of Service				Years of Service			
	<=1	2 - 19	20	>=21	<=1	2 - 14	15	>=16
<=59	0	0	0	0	0	0	0	0
60	0	0	0.500	0.500	0	0	0.500	0.500
61	0	0	0.500	0.150	0	0	0.500	0.150
62	0	0	0.500	0.150	0	0	0.500	0.150
63	0	0	0.500	0.150	0	0	0.500	0.150
64	0	0	0.500	0.150	0	0	0.500	0.150
65	0	0.500	0.500	0.150	0	0.500	0.500	0.150
66	0	0.150	0.150	0.150	0	0.150	0.150	0.150
67	0	0.150	0.150	0.150	0	0.150	0.150	0.150
68	0	0.150	0.150	0.150	0	0.150	0.150	0.150
69	0	0.150	0.150	0.150	0	0.150	0.150	0.150
>=70	0	1.000	1.000	1.000	0	1.000	1.000	1.000

Judicial Rates of Retirement								
Age	Service Multiplier = 2.5				Service Multiplier = 3.5			
	Years of Service				Years of Service			
	<=1	2 - 11	12	>=13	<1	1 - 8	9	>=10
<=59	0	0	0	0	0	0	0	0
60	0	0	0.500	0.500	0	0	0.500	0.500
61	0	0	0.500	0.150	0	0	0.500	0.150
62	0	0	0.500	0.150	0	0	0.500	0.150
63	0	0	0.500	0.150	0	0	0.500	0.150
64	0	0	0.500	0.150	0	0	0.500	0.150
65	0	0.500	0.500	0.150	0	0.500	0.500	0.150
66	0	0.150	0.150	0.150	0	0.150	0.150	0.150
67	0	0.150	0.150	0.150	0	0.150	0.150	0.150
68	0	0.150	0.150	0.150	0	0.150	0.150	0.150
69	0	0.150	0.150	0.150	0	0.150	0.150	0.150
>=70	0	1.000	1.000	1.000	0	1.000	1.000	1.000



Schedule E – Judicial Actuarial Assumptions and Methods

DISABILITY RATES: As shown below for selected ages. 5% of disability cases are assumed to be service related.

Judicial Rates of Disability		
Age	Male	Female
<=29	0.00000	0.00000
30	0.00007	0.00007
35	0.00037	0.00045
40	0.00142	0.00090
45	0.00292	0.00210
50	0.00480	0.00397
55	0.00712	0.00600
60	0.00000	0.00000

TERMINATION RATES: There are no assumed rates of withdrawal prior to service retirement. (For causes other than death, disability, or retirement).

SALARY INCREASE RATES: Salary increase rates are 4.5%.



Schedule E – Virginia Law Officers’ Actuarial Assumptions and Methods

VIRGINIA LAW OFFICERS
Plan Specific Assumptions and Methods

MORTALITY RATES:

Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set forward 5 years and Females set back 3 years.

Post-Retirement:

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with Females set back 1 year.

Post-Disablement:

RP-2000 Disabled Life Mortality Table with Males set back 3 years and no provision for future mortality improvement.

Mortality Rates						
Age	Male			Female		
	Pre Retirement	Post Retirement	Post Disablement	Pre Retirement	Post Retirement	Post Disablement
20	0.00031	0.00024	0.00000	0.00014	0.00014	0.00000
25	0.00040	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00070	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00092	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00116	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00149	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00206	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00353	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00571	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00703	0.00961	0.04498	0.00421	0.00780	0.02803
70	1.00000	0.01641	0.05445	1.00000	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

60% of pre-retirement deaths are assumed to be service related. Mortality improvement is anticipated under the post-retirement mortality assumption as projected with Scale AA.



Schedule E – Virginia Law Officers’ Actuarial Assumptions and Methods

RETIREMENT RATES: The following rates of retirement are assumed for members eligible to retire.

VaLORS Rates of Retirement		
Age	Years of Service	
	Less Than 25	25 or More
<=49	0.000	0.000
50	0.092	0.250
51	0.090	0.250
52	0.090	0.250
53	0.090	0.250
54	0.100	0.250
55	0.095	0.250
56	0.090	0.250
57	0.120	0.300
58	0.100	0.300
59	0.120	0.400
60	0.200	0.400
61	0.260	0.500
62	0.400	1.000
63	0.200	1.000
64	0.200	1.000
>=65	1.000	1.000



Schedule E – Virginia Law Officers’ Actuarial Assumptions and Methods

DISABILITY RATES: As shown below for selected ages. 50% of disability cases are assumed to be service related.

VaLORS Rates of Disability	
Age	Unisex
20	0.00150
25	0.00300
30	0.00600
35	0.00800
40	0.00800
45	0.01000
50	0.01200
55	0.01200
60	0.01000
65	0.00800
70	0.00600

TERMINATION RATES: The following are sample withdrawal rates based on age and years of service (for causes other than death, disability, or retirement).

VaLORS Rates of Termination						
Age	Males			Females		
	Years of Service			Years of Service		
	0-2	3-9	>=10	0-2	3-9	>=10
20	0.250	0.150	0.050	0.200	0.150	0.075
25	0.200	0.150	0.050	0.200	0.150	0.075
30	0.200	0.125	0.050	0.200	0.125	0.060
35	0.200	0.125	0.050	0.200	0.125	0.060
40	0.150	0.105	0.040	0.175	0.105	0.050
45	0.150	0.105	0.040	0.175	0.080	0.040
50	0.150	0.080	0.040	0.175	0.080	0.040
55	0.120	0.065	0.040	0.100	0.120	0.040
60	0.125	0.070	0.040	0.100	0.200	0.040
65	0.150	0.070	0.040	0.100	0.100	0.040
70	0.200	0.070	0.040	0.100	0.100	0.040



Schedule E – Virginia Law Officers’ Actuarial Assumptions and Methods

SALARY INCREASE RATES: The following salary increase rates are used. Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown:

Pay Increase Assumption	
Years of Service	Total Increase (Next Year)
1	4.75%
2	4.75
3	4.75
4	4.75
5	4.65
6	4.40
7	4.40
8	4.40
9	4.40
10 - 19	4.00
20 or more	3.50

It is assumed members covered under VSDP receive a 3.50% annual increase in pay while disabled and this adjusted pay is used to determine deferred benefits payable from the System.

DISABILITY ELECTION: All active members hired on or after January 1, 1999 will enter the Virginia Sickness and Disability Program (VSDP) and will not be eligible to receive non-VSDP disability benefits. For members hired before January 1, 1999 we measure the liabilities based upon the member’s actual election contained in the valuation data.



Schedule E – Summary of Actuarial Assumption and Method Changes

2009 Valuation

1. Changes to the actuarial assumptions as a result of the experience study for the four-year period ending June 30, 2008 are stated below.

SYSTEM	ASSUMPTION CHANGE
State	Increase rates of withdrawals Increase rates of disability retirement up to age 52, females Decrease rates of disability retirement after age 52, all members Decrease rates of service retirement
Teachers	Increase rates of withdrawals Increase rates of disability retirement Decrease rates of service retirement
SPORS	Decrease rates of withdrawals, males Decrease rates of service retirement
VaLORS	Increase rates of withdrawals Decrease rates of disability retirement Change rates of service retirement
Judicial	Increase rates of salary increases

2. For the June 30, 2009 valuation the Board suspended application of the 80%/120% market value of assets corridor on the actuarial value of assets.

2010 Valuation

The investment return rate was decreased from 7.50% per annum to 7.00% per annum.

2011 Valuation

The amortization period of the unfunded less the deferred contribution begins at 30 years on June 30, 2011 and will decrease by one each year until reaching the minimum period of 20 years. The deferred contribution, as defined under 2011 Appropriations Act, Item 469(l)(6), is amortized using a level-dollar, closed, 10 year period beginning June 30, 2011.

2013 Valuation

1. The amortization period of the unfunded as of June 30, 2013 less the deferred contribution under 2011 Appropriations Act, Item 469(l)(6) is amortized using a level-dollar, closed, 30 year period beginning June 30, 2013 decreasing by one each year until reaching 0 years.



Schedule E – Summary of Actuarial Assumption and Method Changes

2. Changes to the actuarial assumptions as a result of the experience study for the four-year period ending June 30, 2012 are summarized below.

STATE SYSTEM	ASSUMPTION CHANGE
State	Update mortality table Decrease rates of service retirement Decrease rates of withdrawals for less than 10 years of service Decrease rates of male disability retirement Reduce rates of salary increase by 0.25% per year
Teachers	Update mortality table Adjustments to rates of service retirement Decrease rates of withdrawals for three through nine years of service Decrease rates of disability Reduce rates of salary increase by 0.25% per year
SPORS	Update mortality table Increase rate of service retirement at age 54
VaLORS	Update mortality table Adjustments to rates of service retirement Decrease rates of withdrawals for females under 10 years of service Increase rates of disability Decrease service related disability rate from 60% to 50%
Judicial	Update mortality table



Schedule F – Actuarial Cost Method

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability, termination from service or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 7.00%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.
2. The employer contributions required to support the benefits of VRS are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from the VRS. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.



Schedule G – Summary of Plan Provisions

Benefit Provisions which apply to all VRS Plans

Plan Year:	Twelve-month period ending June 30th.
Administration:	All plans are administered by the Board of Trustees of the Virginia Retirement System.
Plan 1:	Members hired prior to July 1, 2010 and who were vested as of January 1, 2013.
Plan 2:	Members hired on or after July 1, 2010 but before January 1, 2014, or members hired prior to July 1, 2010 and who were not vested as of January 1, 2013. Members hired after January 1, 2014 in the State Police and Virginia Law Officers Plans are in Plan 2.
Hybrid:	Members hired on or after January 1, 2014 or by member election. There is no Hybrid Plan in the State Police and Virginia Law Officers Plans.
Eligibility:	All full-time, salaried, permanent employees of the Commonwealth of Virginia or of any participating Virginia city, county, town or political subdivision or of any local Virginia school boards are eligible to become members of VRS. This summary covers the provisions relating to state employees.
Employee Contributions:	
Defined Benefit -	Active members in Plan 1 and Plan 2 contribute 5.00% of their creditable compensation per year. Active members in the Hybrid Plan contribute 4% of their creditable compensation per year. The employer may "pick-up" the member's assessments under the provisions of Internal Revenue Code Section 414(h).
Defined Contribution -	Active members in the Hybrid Plan are required to contribute 1% of their creditable compensation per year to the defined contribution component of the Hybrid Plan. Active members can make voluntary additional contributions of up to 4% of their creditable compensation.
Creditable Compensation:	Annual salary minus any overtime pay, payments of a temporary nature, or payments for extra duties.
Optional Forms of Payment:	There are optional forms of payment available on an actuarially equivalent basis, as follows: 100% Survivor Option: Payable for the member's life. Upon the member's death, 100% of the benefit continues to the contingent annuitant. 50% Survivor Option:



Schedule G – Summary of Plan Provisions

Payable for the member's life. Upon the member's death, 50% of the benefit continues to the contingent annuitant.

Leveling Option:

A temporarily increased retirement allowance payable to a date specified by the member and a reduced retirement allowance (on an actuarially equivalent basis) payable after the specified date for the member's remaining lifetime.

Partial Lump Sum Option:

The member may elect to receive a lump sum payment equal to the sum of 12, 24, or 36 payments of the standard monthly life annuity. The member's monthly benefit will be actuarially reduced to reflect the lump sum payment. The member may then elect to receive the reduced monthly annuity under any of the other optional forms of payment.

Actuarial equivalence is based on tables adopted by the Board of Trustees.



Schedule G – State Employees’ Plan Provisions

STATE EMPLOYEES
Plan Specific Benefit Provisions

Effective Date:	March 1, 1952
Type of Plan:	VRS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered an agent multiple-employer PERS with separate cost-sharing pools for state employees and teachers.
Service:	Employees receive credit of one month of service for each month a contribution is made on their behalf to VRS. A member may also purchase credit for certain periods, such as time spent in the military, by paying a purchase rate (5 or 15 percent of the larger of current creditable compensation or final average compensation times the number of years to be purchased). Special rules and limits govern the purchase of additional service.
Average Final Compensation:	
Plan 1:	The average of the member’s highest 36 consecutive months of salary.
Plan 2 & Hybrid:	The average of the member’s highest 60 consecutive months of salary.
Normal Retirement:	
Plan 1:	Eligibility: A member may retire upon Normal Retirement on or after age 65 with credit for 5 years of service. Annual Benefit: 1.7% of average final compensation (AFC) times years of service. Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.



Schedule G – State Employees’ Plan Provisions

Plan 2:

Eligibility:

A member may retire upon Normal Retirement after reaching Social Security normal retirement age plus five years of service.

Annual Benefit:

1.70% of average final compensation (AFC) times years of service up to January 1, 2013 plus 1.65% of AFC times years of service from January 1, 2013.

Payment Form:

Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.

Hybrid:

Eligibility:

A member may retire upon Normal Retirement after reaching Social Security normal retirement age plus five years of service.

Annual Benefit:

1.00% of average final compensation (AFC) times years of service.

Payment Form:

Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.



Schedule G – State Employees’ Plan Provisions

Early Retirement:

Plan 1:

Eligibility:

A member may retire early after reaching age 50 with at least ten years of service credit, or age 55 with credit for at least five years of service.

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and multiplied by a reduction factor. No reduction applies if the member has credit for thirty years of service at retirement and is at least age 50. For members at least age 55, the reduction is 0.5% per month for the first 60 months and 0.4% per month for the next 60 months. This reduction is applied for each month that the retirement age precedes 65, or if more favorable, for each month the service at retirement is less than 30. For members younger than 55 at retirement, the reduction factor determined as though the member were 55 is further reduced by multiplying it by a second factor, to reflect a 0.6% reduction for each month retirement precedes age 55.

Payment Form:

Same as for Normal Retirement above.

Plan 2 & Hybrid:

Eligibility:

A member may retire early after reaching age 60 with five years of service, or upon the sum of their age and their service being 90 (Rule of 90).

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and multiplied by a reduction factor. The reduction is an actuarially equivalent factor. No reduction is applied if the sum of the member’s age and service is equal to 90.

Payment Form:

Same as for Normal Retirement above.



Schedule G – State Employees’ Plan Provisions

Disability Retirement - Non-VSDP: Eligibility:

A member hired prior to 1/1/1999 and who has declined VSDP coverage is eligible from the first day of employment.

Annual Benefit:

For members with less than five years of service credit, the minimum guaranteed benefit. For members with greater than five years of service credit, the greater of the minimum guaranteed benefit and 1.7% of AFC times service credit. Benefit is reduced by Worker's Compensation (if any).

Minimum Guaranteed Benefit:

- **Workers Compensation Guarantee:**
66 2/3% of AFC if member does not qualify for primary Social Security and 50% of AFC if member qualifies for primary Social Security.
- **Special Retirement Allowance Guarantee:**
50% of AFC if member does not qualify for primary Social Security and 33 1/3% of AFC if member qualifies for primary Social Security.

Service Credit:

If disability occurs before age 60, service is the smaller of 1) twice actual service, and 2) rendered service plus the number of years remaining between age at disability and age 60.

Payment Form:

The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump sum to the member's beneficiary. 100% and 50% Survivor Options are also permitted for disability retirement. (A refund of the member's contribution account is paid out for a work-related disability.)



Schedule G – State Employees’ Plan Provisions

Disability Retirement – VSDP:

Provisions applying to members entering in 1999 or later and continuing members who have elected this benefit: In lieu of the above benefits, these members will be covered by the Virginia Sickness and Disability Program (VSDP). Under VSDP, these members will receive a deferred benefit payable at normal retirement from this plan. The deferred benefit will be computed like a normal retirement benefit. For this calculation, a member's creditable service will include the period of disability, and the Average Final Compensation will be adjusted to reflect increases in the cost-of-living between the date of disability and the date of normal retirement. If the member dies while disabled before normal retirement, a death benefit will be determined as though the employee were an active member.

Deferred Termination Benefit:

Plan 1:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 65 or at age 50 with at least 30 years of service. Reduced benefits may commence at or after age 55 with more than 5 years of service or age 50 with at least 10 years of service.

Payment Form:

Same as for Normal Retirement above.

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.



Schedule G – State Employees' Plan Provisions

Plan 2 & Hybrid:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits commence unreduced at Social Security Normal Retirement Age. Reduced benefits may commence on or after age 60 with five years of service.

Payment Form:

Same as for Normal Retirement above.

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.

Withdrawal (Refund) Benefit:

Eligibility:

All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.

Benefit:

The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 4%.



Schedule G – State Employees' Plan Provisions

Death Benefit:

Eligibility:

Death must have occurred while an active or inactive, non-retired member.

Benefit:

Upon the death of a non-vested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, if death occurs while in active service the qualifying survivor of the member is entitled to receive a benefit determined as though the member retired, elected the 100% Survivor Option, then died. If the member dies before reaching age 55, the member is assumed to be 55 for benefit calculation purposes. The qualifying survivor may elect to receive a refund of the contributions plus interest in lieu of the monthly benefit. If the death occurs while inactive, benefits payable are described in Section 9(d).

Work-Related Death:

Qualifying survivor would receive 50% of AFC if beneficiary does not qualify for Social Security survivor benefits and 33 1/3% of AFC if beneficiary qualifies for Social Security survivor benefits. This benefit is reduced by Worker's Compensation. In addition, a refund of the member's contribution account is paid to the beneficiary.

Cost-of-Living Increase:

Plan 1:

Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 3% of the Consumer Price Index increase plus half of each percentage increase from 3% to 7%.

Plan 2 & Hybrid:

Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 2% increase of the Consumer Price Index plus half of each percent from 2% to 4%, with the maximum cost-of-living increase of 3%.

Plans 1, 2 & Hybrid:

The COLA is deferred for one full calendar year after the member reaches unreduced retirement age. The deferred COLA does not apply to employees within 5 years of eligibility for unreduced retirement as of January 1, 2013 and to members who retire with twenty or more years of service.



Schedule G – Teachers’ Plan Provisions

TEACHERS
Plan Specific Benefit Provisions

Effective Date:	March 1, 1952
Type of Plan:	VRS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered an agent multiple-employer PERS with separate cost-sharing pools for state employees and teachers.
Service:	Employees receive credit of one month of service for each month a contribution is made on their behalf to VRS. A member may also purchase credit for certain periods, such as time spent in the military, by paying a purchase rate (5 or 15 percent of the larger of current creditable compensation or final average compensation times the number of years to be purchased). Special rules and limits govern the purchase of additional service.
Average Final Compensation:	
Plan 1:	The average of the member’s highest 36 consecutive months of salary.
Plan 2 & Hybrid:	The average of the member’s highest 60 consecutive months of salary.
Normal Retirement:	
Plan 1:	Eligibility: A member may retire upon Normal Retirement on or after age 65 with credit for 5 years of service. Annual Benefit: 1.7% of average final compensation (AFC) times years of service. Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.



Schedule G – Teachers’ Plan Provisions

Plan 2:

Eligibility:

A member may retire upon Normal Retirement after reaching Social Security normal retirement age plus five years of service.

Annual Benefit:

1.70% of average final compensation (AFC) times years of service up to January 1, 2013 plus 1.65% of AFC times years of service from January 1, 2013.

Payment Form:

Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.

Hybrid:

Eligibility:

A member may retire upon Normal Retirement after reaching Social Security normal retirement age plus five years of service.

Annual Benefit:

1.00% of average final compensation (AFC) times years of service.

Payment Form:

Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.



Schedule G – Teachers’ Plan Provisions

Early Retirement:

Plan 1:

Eligibility:

A member may retire early after reaching age 50 with at least ten years of service credit, or age 55 with credit for at least five years of service.

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and multiplied by a reduction factor. No reduction applies if the member has credit for thirty years of service at retirement and is at least age 50. For members at least age 55, the reduction is 0.5% per month for the first 60 months and 0.4% per month for the next 60 months. This reduction is applied for each month that the retirement age precedes 65, or if more favorable, for each month the service at retirement is less than 30. For members younger than 55 at retirement, the reduction factor determined as though the member were 55 is further reduced by multiplying it by a second factor, to reflect a 0.6% reduction for each month retirement precedes age 55.

Payment Form:

Same as for Normal Retirement above.

Plan 2 & Hybrid:

Eligibility:

A member may retire early after reaching age 60 with five years of service or upon the sum of their age and their service being 90 (Rule of 90).

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and multiplied by a reduction factor. The reduction is an actuarially equivalent factor. No reduction is applied if the sum of the member's age and service is equal to 90.

Payment Form:

Same as for Normal Retirement above.



Schedule G – Teachers’ Plan Provisions

Disability Retirement (Plan 1 and Plan 2):

Eligibility:

A member is eligible from the first day of employment.

Annual Benefit:

For members with less than five years of service credit, the minimum guaranteed benefit. For members with greater than five years of service credit, the greater of the minimum guaranteed benefit and 1.7% of AFC times service credit (1.65% for Plan 2 members). Benefit is reduced by Worker's Compensation (if any).

Minimum Guaranteed Benefit:

- **Workers Compensation Guarantee:**
66 2/3% of AFC if member does not qualify for primary Social Security and 50% of AFC if member qualifies for primary Social Security.
- **Special Retirement Allowance Guarantee:**
50% of AFC if member does not qualify for primary Social Security and 33 1/3% of AFC if member qualifies for primary Social Security.

Service Credit:

If disability occurs before age 60, service is the smaller of 1) twice actual service, and 2) rendered service plus the number of years remaining between age at disability and age 60.

Payment Form:

The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump sum to the member's beneficiary. 100% and 50% Survivor Options are also permitted for disability retirement. (A refund of the member's contribution account is paid out for a work-related disability.)



Schedule G – Teachers’ Plan Provisions

Disability Retirement – VLDP (Hybrid Plan):

Provisions applying to Hybrid members: In lieu of the above benefits, these members will be covered by the Virginia Local Disability Program (VLDP). Under VLDP, these members will receive a deferred benefit payable at normal retirement from this plan. The deferred benefit will be computed like a normal retirement benefit. For this calculation, a member's creditable service will include the period of disability, and the Average Final Compensation will be adjusted to reflect increases in the cost-of-living between the date of disability and the date of normal retirement. If the member dies while disabled before normal retirement, a death benefit will be determined as though the employee were an active member.

Deferred Termination Benefit:

Plan 1:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 65 or at age 50 with at least 30 years of service. Reduced benefits may commence at or after age 55 with more than 5 years of service or age 50 with at least 10 years of service.

Payment Form:

Same as for Normal Retirement above.

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.

Plan 2 & Hybrid:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.



Schedule G – Teachers’ Plan Provisions

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits commence unreduced at Social Security Normal Retirement Age. Reduced benefits may commence on or after age 60 with five years of service.

Payment Form:

Same as for Normal Retirement above.

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.

Withdrawal (Refund) Benefit:

Eligibility:

All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.

Benefit:

The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 4%.

Death Benefit:

Eligibility:

Death must have occurred while an active or inactive, non-retired member.

Benefit:

Upon the death of a non-vested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, if death occurs while in active service the qualifying survivor of the member is entitled to receive a benefit determined as though the member retired, elected the 100% Survivor Option, then died. If the member dies before reaching age 55, the member is assumed to be 55 for benefit calculation purposes. The qualifying survivor may elect to receive a refund of the contributions plus interest in lieu of the monthly benefit. If



Schedule G – Teachers’ Plan Provisions

the death occurs while inactive, benefits payable are described in Section 9(d).

Work-Related Death:

Qualifying survivor would receive 50% of AFC if beneficiary does not qualify for Social Security survivor benefits and 33 1/3% of AFC if beneficiary qualifies for Social Security survivor benefits. This benefit is reduced by Worker's Compensation. In addition, a refund of the member's contribution account is paid to the beneficiary.

Cost-of-Living Increase:

- Plan 1: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 3% of the Consumer Price Index increase plus half of each percentage increase from 3% to 7%.
- Plan 2 & Hybrid: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 2% increase of the Consumer Price Index plus half of each percent from 2% to 4%, with the maximum cost-of-living increase of 3%.
- Plans 1, 2 & Hybrid: The COLA is deferred for one full calendar year after the member reaches unreduced retirement age. The deferred COLA does not apply to employees within 5 years of eligibility for unreduced retirement as of January 1, 2013 and to members who retire with twenty or more years of service.



Schedule G – State Police Plan Provisions

STATE POLICE
Plan Specific Benefit Provisions

Effective Date:	July 1, 1950
Type of Plan:	SPORS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered a single-employer PERS.
Service:	Employees receive credit of one month of service for each month a contribution is made on their behalf to SPORS. A member may also purchase credit for certain periods, such as time spent in the military, by paying a purchase rate (5 or 15 percent of the larger of current creditable compensation or final average compensation times the number of years to be purchased). Special rules and limits govern the purchase of additional service.
Average Final Compensation:	
Plan 1:	The average of the member's highest 36 consecutive months of salary.
Plan 2:	The average of the member's highest 60 consecutive months of salary.
Normal Retirement:	Eligibility: A member may retire upon Normal Retirement on or after age 60 with credit for 5 years of service. Annual Benefit: 1.85% of average final compensation (AFC) times years of service. (Previously 1.7% of AFC times years of service.) Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.



Schedule G – State Police Plan Provisions

Temporary supplement:

A member hired on or after July 1, 1974 who has 20 or more years of hazardous service at retirement or a member hired before July 1, 1974 who is vested under SPORS/VaLORS benefits shall receive an additional annual retirement allowance of \$13,128 payable from the date of retirement to their Social Security normal retirement age. This amount is adjusted biennially based upon increases in Social Security benefits during the interim period.

Early Retirement:

Eligibility:

A member may retire early after reaching age 50 with at least five years of service.

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and reduced by 1/2% for the first 60 months and 4/10% for any additional months of early retirement. This reduction is applied for each month that the retirement age precedes 60, or if more favorable, for each month the service at retirement is less than 25. No reduction applies if the member has credit for 25 years of service at retirement.

Payment Form:

Same as for Normal Retirement above.

Temporary Supplement:

A member hired on or after July 1, 1974 who has 20 or more years of hazardous service at retirement or a member hired before July 1, 1974 who is vested under SPORS/VaLORS benefits shall receive an additional annual retirement allowance of \$13,128 payable from the date of retirement to their Social Security normal retirement age. This amount is adjusted biennially based upon increases in Social Security benefits during the interim period.



Schedule G – State Police Plan Provisions

Disability Retirement - Non-VSDP: Eligibility:

A member hired prior to 1/1/1999 and who has declined VSDP coverage is eligible from the first day of employment.

Monthly Benefit:

For members with less than five years of service credit, the minimum guaranteed benefit. For members with greater than five years of service credit, the greater of the minimum guaranteed benefit and 1.7% of AFC times service credit. Benefit is reduced by Worker's Compensation (if any).

Minimum Guaranteed Benefit:

- **Workers Compensation Guarantee:**
66 2/3% of AFC if member does not qualify for primary Social Security and 50% of AFC if member qualifies for primary Social Security.

- **Special Retirement Allowance Guarantee:**
50% of AFC if member does not qualify for primary Social Security and 33 1/3% of AFC if member qualifies for primary Social Security.

Service Credit:

If disability occurs before age 60, service is the smaller of 1) twice actual service, and 2) rendered service plus the number of years remaining between age at disability and age 60.



Schedule G – State Police Plan Provisions

Payment Form:

The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump sum to the member's beneficiary. 100% and 50% Survivor Options are also permitted for disability retirement. (A refund of the member's contribution account is paid out for a work-related disability.)

Disability Retirement – VSDP:

Provisions applying to members entering in 1999 or later and continuing members who have elected this benefit: In lieu of the above benefits, these members will be covered by the Virginia Sickness and Disability Program (VSDP). Under VSDP, these members will receive a deferred benefit payable at age 60 from this plan. The deferred benefit will be computed like a normal retirement benefit. For this calculation, a member's creditable service will include the period of disability, and the Average Final Compensation will be adjusted to reflect increases in the cost-of-living between the date of disability and age 60. If the member dies while disabled before age 60, a death benefit will be determined as though the employee were an active member.

Deferred Termination Benefit:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 60 or at age 50 with at least 25 years of service. Reduced benefits may commence at or after age 50 if the member is not eligible for an unreduced benefit.

Payment Form:

The form of payment is the same as for Normal Retirement above.



Schedule G – State Police Plan Provisions

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.

Withdrawal (Refund) Benefit:

Eligibility:

All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.

Benefit:

The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 4%.

Death Benefit:

Eligibility:

Death must have occurred while an active, non-retired member.

Benefit:

Upon the death of a non-vested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, if death occurs while in active service the qualifying survivor of the member is entitled to receive a benefit determined as though the member retired, elected the 100% Survivor Option, then died. If the member dies before reaching age 50, the member is assumed to be 50 for benefit calculation purposes. The qualifying survivor may elect to receive a refund of the contributions plus interest in lieu of the monthly benefit. If the death occurs while inactive, benefits payable are described in Section 9(d).

Work-Related Death:

Qualifying survivor would receive 50% of AFC if beneficiary does not qualify for Social Security survivor benefits and 33 1/3% of AFC if beneficiary qualifies for Social Security survivor benefits. This benefit is reduced by Worker's Compensation. In addition, a refund of the member's contribution account is paid to the beneficiary.



Schedule G – State Police Plan Provisions

Cost-of-Living Increase:

- Plan 1: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 3% of the Consumer Price Index increase plus half of each percentage increase from 3% to 7%.
- Plan 2: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 2% increase of the Consumer Price Index plus half of each percent from 2% to 4%, with the maximum cost-of-living increase of 3%. This COLA will be deferred until the date at which the member is eligible for unreduced retirement.
- Plans 1 & 2: The COLA is deferred for one full calendar year after the member reaches unreduced retirement age. The deferred COLA does not apply to employees within 5 years of eligibility for unreduced retirement as of January 1, 2013 and to members who retire with twenty or more years of service.



Schedule G – Judicial Plan Provisions

JUDICIAL
Plan Specific Benefit Provisions

Effective Date: July 1, 1970

Type of Plan: JRS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered a single-employer PERS.

Service:

Appointed or Elected
Prior to 7/1/2010:

Employees receive credit of one month of service multiplied by a weighting factor of 3.5 (2.5 for judges entering JRS on or after January 1, 1995) for each month a contribution is made on their behalf to JRS. This weighted service is used for all purposes under this plan, including determining a member's vested status, determining whether a member is eligible for retirement, computing early retirement reductions, and computing the amount of the benefit. A member may also purchase credit for certain periods, such as time spent in the military, by paying a purchase rate (5 or 15 percent of the larger of current creditable compensation or final average compensation times the number of years to be purchased). Special rules and limits govern the purchase of additional service.

Appointed or Elected
on or After 7/1/2010:

Employees receive credit of one month of service multiplied by a tiered weighting factor for each month a contribution is made on their behalf to JRS. First term judges under age 45 use a weighing factor of 1.5, judges age 45 – 54 use a weighing factor of 2.0, and judges age 55 and above use a weighing factor of 2.5. This weighted service is used for all purposes under this plan, including determining a member's vested status, determining whether a member is eligible for retirement, computing early retirement reductions, and computing the amount of the benefit. A member may also purchase credit for certain periods, such as time spent in the military, by paying a purchase rate (5 or 15 percent of the larger of current creditable compensation or final average compensation times the number of years to be purchased). Special rules and limits govern the purchase of additional service.

Average Final Compensation:

Plan 1: The average of the member's highest 36 consecutive months of salary.

Plan 2: The average of the member's highest 60 consecutive months of salary.



Schedule G – Judicial Plan Provisions

Normal Retirement:

Eligibility:

A member may retire upon Normal Retirement on or after age 65 with credit for 5 years of service.

Annual Benefit:

1.7% of average final compensation (AFC) times years of service, not to exceed 78% of AFC. For members appointed or elected on or after January 1, 2013, the benefit multiplier is 1.65%.

Payment Form:

Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.

Early Retirement:

Eligibility:

A member may retire early after reaching age 55 with credit for five years of service.

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and multiplied by a reduction factor. No reduction applies if the member has reached age 60 and has credit for 30 or more years of creditable service. For other members, the reduction is 0.5% per month for the first 60 months and 0.4% per month for the next 60 months. This reduction is measured from the later of age 60 and the point at which the member would have earned 30 years of service, or if more favorable, from age 65.

Payment Form:

Same as for Normal Retirement above.

Disability Retirement (Plan 1 and Plan 2):

Eligibility:

A member is eligible from the first day of employment.

Annual Benefit:

For members with less than five years of service credit, the minimum guaranteed benefit. For members with



Schedule G – Judicial Plan Provisions

greater than five years of service credit, the greater of the minimum guaranteed benefit and 1.7% of AFC times service credit (1.65% for members appointed or elected on or after January 1, 2013). Benefit is reduced by Worker's Compensation (if any).

Minimum Guaranteed Benefit:

- Workers Compensation Guarantee:
66 2/3% of AFC if member does not qualify for primary Social Security and 50% of AFC if member qualifies for primary Social Security.
- Special Retirement Allowance Guarantee
50% of AFC if member does not qualify for primary Social Security and 33 1/3% of AFC if member qualifies for primary Social Security.

Service Credit:

If disability occurs before age 60, service is the smaller of 1) twice actual service, and 2) rendered service plus the number of years remaining between age at disability and age 60.

Payment Form:

The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump sum to the member's beneficiary. 100% and 50% Survivor Options are also permitted for disability retirement. (A refund of the member's contribution account is paid out for a work-related disability.)

Disability Retirement – VSDP (Hybrid Plan):

Provisions applying to Hybrid members: In lieu of the above benefits, these members will be covered by the Virginia Sickness and Disability Program (VSDP). Under VSDP, these members will receive a deferred benefit payable at normal retirement from this plan. The deferred benefit will be computed like a normal retirement benefit. For this calculation, a member's creditable service will include the period of disability, and the Average Final Compensation will be adjusted to reflect increases in the cost-of-



Schedule G – Judicial Plan Provisions

living between the date of disability and the date of normal retirement. If the member dies while disabled before normal retirement, a death benefit will be determined as though the employee were an active member.

Deferred Termination Benefit:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 65 or at age 60 with at least 30 years of service. Reduced benefits may commence at or after age 55 if the member is not eligible for an unreduced benefit.

Payment Form:

The form of payment is the same as for Normal Retirement above.

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.

Withdrawal (Refund) Benefit:

Eligibility:

All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.

Benefit:

The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 4%.

Death Benefit

Eligibility:

Death must have occurred while an active, non-retired member.



Schedule G – Judicial Plan Provisions

Benefit:

Upon the death of a non-vested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, if death occurs while in active service the qualifying survivor of the member is entitled to receive a benefit determined as though the member retired, elected the 100% Survivor Option, then died. If the member dies before reaching age 55, the member is assumed to be 55 for benefit calculation purposes. The qualifying survivor may elect to receive a refund of the contributions plus interest in lieu of the monthly benefit. If the death occurs while inactive, benefits payable are described in Section 8(d).

Work-Related Death:

Qualifying survivor would receive 50% of AFC if beneficiary does not qualify for Social Security survivor benefits, and 33 1/3% of AFC if beneficiary qualifies for Social Security survivor benefits. This benefit is reduced by Worker's Compensation. In addition, a refund of the member's contribution account is paid to the beneficiary.

Cost-of-Living Increase:

- Plan 1: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 3% of the Consumer Price Index increase plus half of each percentage increase from 3% to 7%.
- Plan 2: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 2% increase of the Consumer Price Index plus half of each percent from 2% to 4%, with the maximum cost-of-living increase of 3%.
- Plans 1 & 2: The COLA is deferred for one full calendar year after the member reaches unreduced retirement age. The deferred COLA does not apply to employees within 5 years of eligibility for unreduced retirement as of January 1, 2013 and to members who retire with twenty or more years of service.



Schedule G – Virginia Law Officers’ Plan Provisions

**VIRGINIA LAW OFFICERS
Plan Specific Benefit Provisions**

Effective Date:	October 1, 1999
Type of Plan:	VaLORS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered a single-employer PERS.
Service:	Employees receive credit of one month of service for each month a contribution is made on their behalf to VaLORS. A member may also purchase credit for certain periods, such as time spent in the military, by paying a purchase rate (5 or 15 percent of the larger of current creditable compensation or final average compensation times the number of years to be purchased). Special rules and limits govern the purchase of additional service.
Average Final Compensation:	
Plan 1:	The average of the member’s highest 36 consecutive months of salary.
Plan 2:	The average of the member’s highest 60 consecutive months of salary.
Normal Retirement:	Eligibility: A member may retire upon Normal Retirement on or after age 60 with credit for 5 years of service. Annual Benefit: For all employees hired on or after July 1, 2001, the benefit is calculated as 2.0% of average final compensation (AFC) times years of service. Employees hired before July 1, 2001, must make a one-time election to receive benefits under (i) or (ii) below: (i) 1.7% of average final compensation (AFC) times years of service plus the temporary supplement described in 5(d). (ii) 2.0% of average final compensation (AFC) times years of service and no temporary supplement.



Schedule G – Virginia Law Officers’ Plan Provisions

Payment Form:

Benefits are paid as a monthly life annuity, with a guarantee that if the payments do not exceed the member's contributions plus interest, determined as of the date at retirement, the balance will be paid in a lump sum to the member's beneficiary. Optional forms of payment are available.

Temporary supplement:

Temporary Supplement: A member who is hired before July 1, 2001, and who was either (i) hired on or after July 1, 1974 who has 20 or more years of hazardous service at retirement or (ii) a member hired before July 1, 1974 who is vested under SPORS/VaLORS benefits shall be eligible to receive an additional annual retirement allowance of \$13,128 payable from the date of retirement to age 65. This amount is adjusted biennially based upon increases in Social Security benefits during the interim period. The eligible employee must have made a one-time election to receive benefits under b(i) to receive this supplement.

Early Retirement:

Eligibility:

A member may retire early after reaching age 50 with credit for five years of service.

Annual Benefit:

Calculated the same as the normal retirement benefit, using actual service at retirement and reduced by 0.5% per month for the first 60 months and 0.4% per month for any additional months of early retirement. This reduction is applied for each month that the retirement age precedes 60, or if more favorable, for each month the service at retirement is less than 25. No reduction applies if the member has credit for 25 years of service at retirement.

Payment Form:

Same as for Normal Retirement above.



Schedule G – Virginia Law Officers’ Plan Provisions

Temporary Supplement:

Temporary Supplement: A member who is hired before July 1, 2001, and who was either (i) hired on or after July 1, 1974 who has 20 or more years of hazardous service at retirement or (ii) a member hired before July 1, 1974 who is vested under SPORS/VaLORS benefits shall be eligible to receive an additional annual retirement allowance or \$13,128 payable from the date of retirement to age 65. This amount is adjusted biennially based upon increases in Social Security benefits during the interim period. The eligible employee must have made a one-time election to receive benefits under 5(b)(i) to receive this supplement.

Disability Retirement - Non-VSDP: Eligibility:

A member hired prior to 1/1/1999 and who has declined VSDP coverage is eligible from the first day of employment.

Monthly Benefit:

For members with less than five years of service credit, the minimum guaranteed benefit. For members with greater than five years of service credit, the greater of the minimum guaranteed benefit and 1.7% of AFC times service credit. Benefit is reduced by Worker's Compensation (if any).

Minimum Guaranteed Benefit:

- Workers Compensation Guarantee:
66 2/3% of AFC if member does not qualify for primary Social Security and 50% of AFC if member qualifies for primary Social Security.
- Special Retirement Allowance Guarantee:
50% of AFC if member does not qualify for primary Social Security and 33 1/3% of AFC if member qualifies for primary Social Security.



Schedule G – Virginia Law Officers’ Plan Provisions

Service Credit:

If disability occurs before age 60, service is the smaller of 1) twice actual service, and 2) rendered service plus the number of years remaining between age at disability and age 60.

Payment Form:

The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump sum to the member's beneficiary. 100% and 50% Survivor Options are also permitted for disability retirement. (A refund of the member's contribution account is paid out for a work-related disability.)

Disability Retirement – VSDP:

Provisions applying to members entering in 1999 or later and continuing members who have elected this benefit: In lieu of the above benefits, these members will be covered by the Virginia Sickness and Disability Program (VSDP). Under VSDP, these members will receive a deferred benefit payable at age 60 from this plan. The deferred benefit will be computed like a normal retirement benefit. For this calculation, a member's creditable service will include the period of disability, and the Average Final Compensation will be adjusted to reflect increases in the cost-of-living between the date of disability and age 60. If the member dies while disabled before age 60, a death benefit will be determined as though the employee were an active member.

Deferred Termination Benefit:

Eligibility:

A member with at least five years of service who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

Annual Benefit:

Same as normal retirement benefit, but both AFC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 60 or at age 50 with at least 25 years of service. Reduced benefits may commence at or after age 50 if the member is not eligible for an unreduced benefit.



Schedule G – Virginia Law Officers’ Plan Provisions

Payment Form:

The form of payment is the same as for Normal Retirement above.

Death Benefit:

The beneficiary of a member who dies after leaving active service but before retiring is entitled to receive a lump sum distribution of the deceased member's contribution account.

Withdrawal (Refund) Benefit:

Eligibility:

All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.

Benefit:

The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 4%.

Death Benefit:

Eligibility:

Death must have occurred while an active or inactive, non-retired member.

Benefit:

Upon the death of a non-vested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, if death occurs while in active service the qualifying survivor of the member is entitled to receive a benefit determined as though the member retired, elected the 100% Survivor Option, then died. If the member dies before reaching age 50, the member is assumed to be 50 for benefit calculation purposes. The qualifying survivor may elect to receive a refund of the contributions plus interest in lieu of the monthly benefit. If the death occurs while inactive, benefits payable are described in Section 9(d).



Schedule G – Virginia Law Officers’ Plan Provisions

Work-Related Death:

Qualifying survivor would receive 50% of AFC if beneficiary does not qualify for Social Security survivor benefits and 33 1/3% of AFC if beneficiary qualifies for Social Security survivor benefits. This benefit is reduced by Worker's Compensation. In addition, a refund of the member's contribution account is paid to the beneficiary.

Cost-of-Living Increase:

- Plan 1: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 3% of the Consumer Price Index increase plus half of each percentage increase from 3% to 7%.
- Plan 2: Members qualify for cost-of-living increase on July 1 of the second calendar year after retirement. Automatic cost-of-living increases are calculated as the first 2% increase of the Consumer Price Index plus half of each percent from 2% to 4%, with the maximum cost-of-living increase of 3%.
- Plans 1 & 2: The COLA is deferred for one full calendar year after the member reaches unreduced retirement age. The deferred COLA does not apply to employees within 5 years of eligibility for unreduced retirement as of January 1, 2013 and to members who retire with twenty or more years of service.



Schedule G – Summary of Plan Changes

Summary of Plan Changes

1996 Valuation

1. Any member with at least 25 years of service may purchase prior service credit for a) active duty military service in the armed forces of the United States, b) certified creditable service in the retirement system of another state, or c) both at the rate of 5% of current compensation or average final compensation, if greater, times years of service purchased.
2. VRS may enter into an agreement with any political subdivision of the Commonwealth of Virginia which has a defined benefit plan that is not supplemental to VRS to permit portability of service credit on a cost-neutral basis.
3. Early retirement is allowed at age 50 with 10 years of service. The early retirement benefit is determined as if the member is age 55 (but using actual service and AFC) reduced by 0.6% for each month the member is younger than age 55. This benefit can be no smaller than the value of the member's contributions and interest paid in monthly installments over the member's lifetime.
4. The service multiplier for judges entering the Retirement System after January 1, 1995 is 2.5.
5. Effective 7/1/98, a health credit of \$1.50 per month per year of service (up to 30 years) is automatically provided to teachers in VRS who retire with at least 15 years of service. An additional credit of \$1.00 per month per year of service (up to 30 years) can be provided.

1998 Valuation

1. Effective January 1, 1999, the retirement benefit became 1.7% of average final pay times years of service. The 3% benefit adjustment was eliminated for future retirees. A 1.6% ad hoc benefit increase was provided for all retirees and beneficiaries receiving benefits as of December 31, 1999.
2. On January 1, 1999, the Virginia Sickness and Disability Program became effective. All future new members will be covered by this program, and will only receive a deferred retirement benefit from VRS. Members joining before 1999 were allowed to make a one-time irrevocable election to join this program. (Applies to State Employees and State Police.)
3. Effective July 1, 1999, state employees, teachers and employees of participating local units that had not elected out of this benefit may retire with an unreduced benefit if they are at least 50 years old and they have earned at least 30 years of service.

1999 Valuation

1. 100% Joint and Survivor Option is payable in the case of death of a member who dies while in active service.
2. 100% Joint and Survivor Option is payable for disability retirement.



Schedule G – Summary of Plan Changes

2000 Valuation

1. On October 1, 1999, the Virginia Law Officers' Retirement System became effective.
2. On November 15, 2000 the VRS Board of Trustees adopted the recommended economic and demographic assumptions proposed by the actuary as a result of the June 2000 actuarial experience.
3. The Board of Trustees adopted the use of a "pooled" contribution rate for State Employees and Teachers.

2001 Valuation

1. The State Police System had their temporary supplement starting at retirement extended from age 65 to their Social Security retirement age.
2. The Virginia Law Officers System has changed their benefit multiplier from 1.7% to 2.0% of pay with no temporary supplement for all new hires and rehires after July 1, 2001 as well as for current participants who have made an election to change formulas.
3. The Partial Lump Sum Option was added as an additional optional form of payment. This option provides the retiring member with a lump sum payment equal to the sum of 12, 24, or 36 payments of the standard monthly life annuity. The member's monthly annuity is actuarially reduced to reflect the lump sum payment.

2002 Valuation

No material changes were made to the plan provisions.

2003 Valuation

No actuarially material changes were made to the plan provisions. Listed below are the two minor changes of note.

1. School superintendents with five years of service may now purchase an additional ten years of out-of-state service. The superintendent must not be eligible for an out-of-state benefit.
2. The leveling option was restored as an optional form of payment. Benefits may be leveled to age 62 or older, and the benefit cannot reduce more than 50%. Any COLAs are calculated on the basic benefit amount.

2004 Valuation

No material changes were made to the plan provisions.

2005 Valuation

No material changes were made to the plan provisions.

2006 Valuation

No material changes were made to the plan provisions.



Schedule G – Summary of Plan Changes

2007 Valuation

The State Police changed their benefit multiplier from 1.7% to 1.85% of pay.

2008 Valuation

No material changes were made to the plan provisions.

2009 Valuation

The temporary retirement supplement for SPORS and VaLORS changed from \$11,508 to \$12,456.

2010 Valuation

No material changes were made to the plan provisions.

2011 Valuation

In 2010, VRS adopted a second retirement plan. All employees hired on or after July 1, 2010 are automatically enrolled in this plan. The differences between Plan 1 and Plan 2 are listed below:

1. The Average Final Compensation is now based on the highest 60 consecutive months of service.
2. The Cost of Living Adjustment was adjusted to be the first 2% increase of the Consumer Price Index plus half of each percent from 2% to 10%, with the maximum cost-of-living increases of 6%.
3. The Normal Retirement Age is Social Security normal retirement age plus five years of service. A member is eligible for unreduced early retirement when the sum of his or her age plus years of service is 90 (Rule of 90). Eligibility for reduced early retirement is at age 60 with five years of service.
4. Judges service weight has been changed. For first term judges less than age 45 the service weight is 1.5; for judges age 45 – 54 the service weight is 2.0; finally, for judges age 55 and above the service weight is 2.5.

The State Employees Plan and the Teachers Plan adopted changes 1, 2, and 3 listed above. The State Police Plan and the Virginia Law Officers Plan adopted changes 1 and 2 listed above. The Judicial Plan adopted changes 1, 2, and 4



Schedule G – Summary of Plan Changes

2012 Valuation

In, 2012 HB 1130 / SB 498 was enacted and will go into effect on January 1, 2013. A summary of this bill is listed below:

1. Active non-vested members in Plan 1 will have their Average Final Compensation based on the highest 60 consecutive months of service instead of the highest 36 consecutive months of service. This provision applies to all plans.
2. Active non-vested members in Plan 1 and all Plan 2 members will accrue benefits at 1.65% as of the effective date. This provision applies only to the State and Teacher Plans as well as members in political subdivision plans not covered by hazardous duty benefits members.
3. Active members in the Judicial plan hired after January 1, 2013 will accrue benefits at 1.65%.
4. Active non-vested members in Plan 1 will now have to satisfy the Rule of 90 (sum of age and service at least 90) or reach their Social Security Normal Retirement Age to be eligible for Unreduced Retirement. These same members must attain age 60 with 5 years of service to be eligible for Early Retirement. This provision applies only to the State and Teachers Plans as well as members in political subdivision plans not covered by hazardous duty benefits members.
5. Active non-vested members in Plan 1 and all Plan 2 members will only be able to receive a maximum COLA of 3%. This provision applies to all plans.
6. All active employees not within 5 years of eligibility for unreduced retirement as of January 1, 2013 and retiring with less than 20 years of service will have their COLA deferred to one year after their unreduced retirement date after beginning to receive benefits. All active employees within 5 years of eligibility for unreduced retirement as of January 1, 2013 are grandfathered into the old provisions with no deferral of the COLA.

2014 Valuation

The 2014 valuation includes Hybrid Plan members for the first time. The Hybrid Plan covers eligible employees hired on or after January 1, 2014 in the State, Teachers and Judicial plans. The Hybrid Plan does not apply to members in the State Police and VaLORS plans. The Hybrid Plan consists of defined benefit plan and defined contribution plan components.

Defined benefit plan component

The benefits under the defined benefit plan are similar to Plan 2 benefits except that the benefit accrual rate is 1% under the Hybrid Plan.

Defined contribution plan component

Active members in the Hybrid Plan are required to contribute 1% of their creditable compensation per year to the defined contribution component of the Hybrid Plan. Active members can make voluntary additional contributions of up 4% of their creditable compensation. The maximum employee contribution is 5% of pay.

Employers are also required to contribute 1% of pay to the defined contribution component for members in the Hybrid Plan. In addition, employers match the employee's first 1% of voluntary contributions and 0.5%



Schedule G – Summary of Plan Changes

match for each additional 1% of voluntary employee contributions. The maximum employer contribution is 3.5% of pay of members in the defined contribution component of the Hybrid Plan.



Schedule H – Schedule of Active Member Data

**STATE EMPLOYEES
As of June 30, 2014**

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	36	0	0	0	0	0	0	36	\$ 838,960
20 to 24	1,583	8	0	0	0	0	0	1,591	\$ 49,088,386
25 to 29	4,328	719	13	0	0	0	0	5,060	\$ 188,064,988
30 to 34	3,803	2,331	497	14	0	0	0	6,645	\$ 290,789,434
35 to 39	2,952	2,373	1,256	359	18	0	0	6,958	\$ 333,750,251
40 to 44	2,744	2,356	1,570	1,055	395	35	0	8,155	\$ 413,884,444
45 to 49	2,458	2,341	1,690	1,311	1,123	777	40	9,740	\$ 492,335,128
50 to 54	2,222	2,357	1,815	1,478	1,375	1,812	887	11,946	\$ 623,732,338
55 to 59	1,797	2,046	1,678	1,393	1,368	1,631	2,441	12,354	\$ 672,000,057
60	226	339	315	260	236	291	545	2,212	\$ 127,388,600
61	243	344	273	268	244	272	548	2,192	\$ 123,084,935
62	149	234	265	232	236	229	472	1,817	\$ 103,288,989
63	165	234	221	217	191	228	374	1,630	\$ 94,609,644
64	100	168	221	179	161	182	353	1,364	\$ 80,711,822
65	72	132	157	119	115	145	268	1,008	\$ 63,115,223
66	37	127	115	104	91	109	223	806	\$ 51,823,310
67	32	88	93	93	76	72	192	646	\$ 40,225,431
68	25	49	60	51	36	46	113	380	\$ 25,634,157
69	14	46	32	37	29	36	102	296	\$ 18,784,059
70 & Over	45	97	107	120	83	102	340	894	\$ 61,628,649
Total	23,031	16,389	10,378	7,290	5,777	5,967	6,898	75,730	\$ 3,854,778,805

Average Age: 48.26

Average Service: 12.72



Schedule H – Schedule of Active Member Data

TEACHERS
As of June 30, 2014

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	8	0	0	0	0	0	0	8	\$ 176,627
20 to 24	3,431	4	0	0	0	0	0	3,435	\$ 132,505,439
25 to 29	11,220	3,480	11	0	0	0	0	14,711	\$ 631,837,130
30 to 34	5,229	9,284	3,011	7	0	0	0	17,531	\$ 812,662,063
35 to 39	3,487	4,865	6,439	1,751	7	0	0	16,549	\$ 813,308,227
40 to 44	3,913	4,627	4,716	4,913	1,408	11	0	19,588	\$ 996,469,225
45 to 49	3,445	4,600	4,212	3,058	3,336	1,075	11	19,737	\$ 1,002,141,294
50 to 54	2,519	4,138	4,471	2,969	2,204	2,746	1,055	20,102	\$ 1,020,688,600
55 to 59	1,480	2,830	3,690	3,104	2,334	1,996	3,092	18,526	\$ 1,000,919,712
60	192	400	621	551	464	369	589	3,186	\$ 179,558,081
61	159	365	460	540	467	400	593	2,984	\$ 170,523,481
62	137	310	465	451	404	338	505	2,610	\$ 149,452,972
63	110	233	365	365	331	274	379	2,057	\$ 117,150,051
64	78	236	267	311	306	272	322	1,792	\$ 103,520,266
65	63	142	243	216	212	210	236	1,322	\$ 76,176,789
66	54	126	144	149	132	127	160	892	\$ 50,867,990
67	32	87	129	101	92	77	103	621	\$ 34,413,157
68	22	38	64	41	60	51	64	340	\$ 19,158,951
69	19	34	55	42	38	35	63	286	\$ 16,531,032
70 & Over	39	100	117	99	86	75	184	700	\$ 34,732,140
Total	35,637	35,899	29,480	18,668	11,881	8,056	7,356	146,977	\$ 7,362,793,227

Average Age: 45.18

Average Service: 11.97



Schedule H – Schedule of Active Member Data

STATE POLICE
As of June 30, 2014

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	0	0	0	0	0	0	0	0	\$ -
20 to 24	119	0	0	0	0	0	0	119	\$ 4,565,780
25 to 29	230	41	0	0	0	0	0	271	\$ 11,427,928
30 to 34	72	147	91	1	0	0	0	311	\$ 14,681,151
35 to 39	37	50	138	52	0	0	0	277	\$ 14,152,155
40 to 44	29	33	82	148	20	0	0	312	\$ 17,355,508
45 to 49	17	22	35	58	96	80	0	308	\$ 19,281,157
50 to 54	14	16	13	19	41	117	22	242	\$ 16,907,228
55 to 59	1	3	7	9	6	23	70	119	\$ 9,233,565
60	0	0	0	1	0	2	6	9	\$ 836,557
61	0	0	1	0	0	1	9	11	\$ 896,094
62	0	0	2	0	0	0	5	7	\$ 624,616
63	0	0	0	0	0	1	7	8	\$ 727,307
64	0	0	0	0	0	0	3	3	\$ 298,975
65	0	0	0	0	0	0	3	3	\$ 261,929
66	0	0	0	0	0	0	2	2	\$ 218,183
67	0	0	0	0	0	0	5	5	\$ 474,392
68	0	0	0	0	0	0	1	1	\$ 98,282
69	0	1	0	0	0	0	2	3	\$ 262,577
70 & Over	0	0	0	0	0	0	0	0	\$ -
Total	519	313	369	288	163	224	135	2,011	\$ 112,303,384

Average Age: 40.54

Average Service: 13.65



Schedule H – Schedule of Active Member Data

JUDICIAL
As of June 30, 2014

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	0	0	0	0	0	0	0	0	\$ -
20 to 24	0	0	0	0	0	0	0	0	\$ -
25 to 29	0	0	0	0	0	0	0	0	\$ -
30 to 34	0	0	0	0	0	0	0	0	\$ -
35 to 39	1	0	0	0	0	0	0	1	\$ 146,599
40 to 44	10	6	0	0	0	0	0	16	\$ 2,420,999
45 to 49	15	21	5	1	0	0	0	42	\$ 6,336,227
50 to 54	16	15	12	6	0	0	0	49	\$ 7,614,262
55 to 59	22	28	21	13	9	0	0	93	\$ 14,373,619
60	2	3	7	4	4	0	0	20	\$ 3,049,767
61	1	2	10	2	4	2	0	21	\$ 3,277,377
62	5	5	5	6	5	1	0	27	\$ 4,207,474
63	6	7	3	6	3	0	0	25	\$ 3,841,898
64	1	3	3	0	6	1	0	14	\$ 2,229,287
65	1	2	4	4	5	1	0	17	\$ 2,648,486
66	0	3	3	8	6	1	0	21	\$ 3,176,253
67	1	4	4	6	3	2	0	20	\$ 3,078,491
68	0	0	0	1	1	2	0	4	\$ 635,233
69	0	2	3	3	1	2	2	13	\$ 2,016,760
70 & Over	0	0	0	0	0	2	0	2	\$ 319,776
Total	81	101	80	60	47	14	2	385	\$ 59,372,508

Average Age: 58.53

Average Service: 11.32



Schedule H – Schedule of Active Member Data

VIRGINIA LAW OFFICERS
As of June 30, 2014

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	17	0	0	0	0	0	0	17	\$ 482,902
20 to 24	822	8	0	0	0	0	0	830	\$ 25,286,056
25 to 29	996	293	3	0	0	0	0	1,292	\$ 42,496,703
30 to 34	562	523	85	6	0	0	0	1,176	\$ 41,250,440
35 to 39	340	376	209	177	2	0	0	1,104	\$ 40,740,652
40 to 44	336	339	242	363	96	0	0	1,376	\$ 53,201,425
45 to 49	199	309	211	304	237	96	0	1,356	\$ 54,960,032
50 to 54	164	258	184	269	132	79	29	1,115	\$ 45,072,924
55 to 59	89	170	141	188	71	46	33	738	\$ 30,940,373
60	5	27	22	34	9	4	8	109	\$ 4,650,534
61	5	21	17	25	9	6	7	90	\$ 3,743,099
62	4	18	16	13	6	5	3	65	\$ 2,674,308
63	6	15	4	8	8	1	4	46	\$ 1,898,216
64	1	10	5	12	3	3	3	37	\$ 1,568,888
65	0	3	7	6	5	0	5	26	\$ 1,226,268
66	0	5	2	4	1	3	4	19	\$ 926,497
67	0	3	4	1	2	1	0	11	\$ 509,330
68	0	1	1	2	2	0	0	6	\$ 248,888
69	0	0	0	1	1	1	1	4	\$ 211,645
70 & Over	1	1	3	3	1	0	3	12	\$ 619,464
Total	3,547	2,380	1,156	1,416	585	245	100	9,429	\$ 352,708,644

Average Age: 40.86

Average Service: 9.09



Schedule I – Schedule of Retiree and Beneficiary Data

RETIREE AND BENEFICIARY DATA
As of June 30, 2014

Employer	Prior Year Total Retirees and Beneficiaries	Retirees and Beneficiaries		Current Year Total Retirees and Beneficiaries	Current Annual Allowances (000s)	Prior Annual Allowances (000s)	% Increase in Annual Allowances	Average Annual Allowances	Prior Year Average Annual Allowances	% Increase in Average Annual Allowances
		Added	Removed							
State	49,829	3,152	1,718	51,263	\$1,068,340	\$1,021,572	4.6%	\$ 20,840	\$ 20,502	1.7%
Teacher	73,908	5,086	1,596	77,398	1,821,825	1,718,783	6.0%	23,538	23,256	1.2%
Political	41,757	3,674	1,405	44,026	742,487	693,202	7.1%	16,865	16,601	1.6%
Total VRS	165,494	11,912	4,719	172,687	\$ 3,632,652	\$3,433,557	5.8%	\$ 21,036	\$ 20,747	1.4%
State Police	1,208	55	24	1,239	48,853	47,005	3.9%	39,429	38,912	1.3%
VaLORS	3,213	311	59	3,465	76,150	75,370	1.0%	21,977	23,458	-6.3%
Judicial	489	32	16	505	37,076	36,169	2.5%	73,418	73,966	-0.7%
Totals	170,404	12,310	4,818	177,896	\$ 3,794,731	\$3,592,102	5.6%	\$ 21,331	\$ 21,080	1.2%

CHANGE IN ALLOWANCES FOR RETIREES AND BENEFICIARIES
As of June 30, 2014

	Prior Year Annual Allowances	COLA	Additions	Deletions	Current Year Annual Allowances
State	\$ 1,021,572	\$ 14,915	\$ 65,981	\$ 34,128	\$ 1,068,340
Teacher	1,718,783	25,094	110,251	32,303	1,821,825
Political	693,202	10,121	62,730	23,566	742,487
Total VRS	\$ 3,433,557	\$ 50,130	\$ 238,962	\$ 89,997	\$ 3,632,652
State Police	47,005	686	2,286	1,124	48,853
VaLORS	75,370	1,100	6,636	6,956	76,150
Judges	36,169	528	2,424	2,045	37,076
Totals	\$ 3,592,102	\$ 52,444	\$ 250,308	\$ 100,123	\$ 3,794,731