



# Cavanaugh Macdonald

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December 22, 2010

Ms. Patricia Bishop  
Policy Planning and Compliance Director  
Virginia Retirement System  
1200 E. Main Street  
Richmond, VA 23219

Dear Ms. Bishop:

Enclosed are 13 original bound copies of the "Report on the Actuarial Valuation of the Virginia Retirement System" prepared as of June 30, 2010.

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:lam

Enclosure

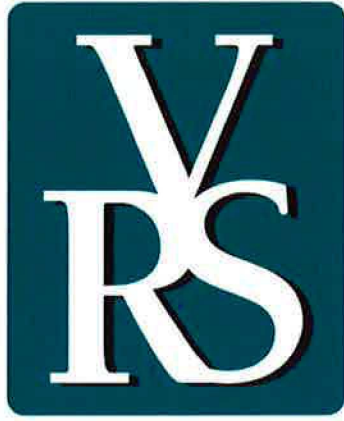
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3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

[www.CavMacConsulting.com](http://www.CavMacConsulting.com)

Offices in Englewood, CO • Kennesaw, GA • Hilton Head Island, SC



Virginia  
Retirement  
System

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

**Prepared as of June 30, 2010**



**Cavanaugh Macdonald**

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CONSULTING, LLC

*The experience and dedication you deserve*

December 22, 2010

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, 2010.

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

The purpose of this report is to provide a summary of the funded status of VRS as of June 30, 2010, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation results indicate that the 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. For comparison, in the table below we present the recommended employer contribution rates based on the June 30, 2009 actuarial valuations and the employer contribution rates adopted for fiscal years ending in 2011 and 2012.

Employer Contribution Rates			
Division	6/30/2010 Valuation	6/30/2009 Valuation	Adopted FY 2011 & 2012
State Employees	13.29%	8.46%	2.13% & 2.08%
Teachers	17.41	12.91	3.93% & 5.16%
State Police	33.31	25.56	7.76% & 7.73%
Judicial	55.13	46.79	28.81% & 28.65%
Virginia Law Officers	20.31	15.93	5.12% & 5.07%

Contribution rates for VRS employers are established every two years. The actuarially calculated employer contribution rates based on the June 30, 2010 results presented in this report are for informational purposes only.

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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. Five-year smoothed market value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 20-year period, on the assumption that payroll will increase by 3% annually. 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 25 and 27. The valuation reflects a change in the assumed annual rate of return from 7.5% to 7.0% adopted by the Board of Trustees.

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 H include the information with respect to the Political Subdivisions participating in VRS. All historical information that references a valuation date prior to June 30, 2008 was prepared by a previous actuarial firm.

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.

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, appearing to read 'Thomas J. Cavanaugh', with a stylized flourish at the end.

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA  
Chief Executive Officer

A handwritten signature in blue ink, appearing to read 'Jose I. Fernandez', with a long, sweeping flourish extending to the right.

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

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

VALUATION DATE	June 30, 2010	June 30, 2009
<b>Members:</b>		
Active	76,033	78,339
Long Term Disability	2,573	2,401
Retirees and Beneficiaries	50,600	47,910
Inactive, Vested	9,806	9,696
Inactive, Non-Vested	18,792	18,137
Inactive, active elsewhere in VRS	<u>9,682</u>	<u>9,822</u>
Total	167,486	166,305
Annual Covered Payroll	\$ 3,514,396	\$ 3,619,478
Annual Retirement Benefits	\$ 861,362	\$ 795,341
<b>Total Assets:</b>		
Actuarial Value	\$ 14,700,854	\$ 15,049,901
Market Value	12,384,638	11,253,767
Actuarial Accrued Liability	\$ 19,539,453	\$ 17,925,879
Unfunded Actuarial Accrued Liability (UAAL)	4,838,599	2,875,978
<b>RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING*</b>	<b>Informational Purposes</b>	<b>2011 &amp; 2012</b>
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	3.64 %	2.67 %
Amortization of UAAL	<u>9.65 %</u>	<u>5.79 %</u>
Annual Recommended Contribution	13.29 %	8.46 %
Amortization Period	20 years	20 years

\* The adopted contribution rates for fiscal years ending 2011 and 2012 are 2.13% and 2.08%, respectively.



*Section I – Summary of Principal Results*

**TEACHERS  
(\$ IN THOUSANDS)**

VALUATION DATE	June 30, 2010	June 30, 2009
<b>Members:</b>		
Active	148,462	148,762
Retirees and Beneficiaries	66,934	64,073
Inactive, Vested	16,393	16,181
Inactive, Non-Vested	27,020	26,546
Inactive, active elsewhere in VRS	<u>5,237</u>	<u>5,375</u>
Total	264,046	260,937
Annual Covered Payroll	\$ 7,119,889	\$ 7,160,842
Annual Retirement Benefits	\$ 1,393,163	\$ 1,326,850
<b>Total Assets:</b>		
Actuarial Value	\$ 25,447,677	\$ 25,764,665
Market Value	21,517,178	19,302,368
Actuarial Accrued Liability	\$ 37,088,576	\$ 33,860,514
Unfunded Actuarial Accrued Liability (UAAL)	11,640,899	8,095,849
<b>RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING*</b>	<b>Informational Purposes</b>	<b>2011 &amp; 2012</b>
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	5.95 %	4.68 %
Amortization of UAAL	<u>11.46 %</u>	<u>8.23 %</u>
Annual Recommended Contribution	17.41 %	12.91 %
Amortization Period	20 years	20 years

\* The adopted contribution rates for fiscal years ending 2011 and 2012 are 3.93% and 5.16%, respectively.



Section I – Summary of Principal Results

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

VALUATION DATE	June 30, 2010	June 30, 2009
<b>Members:</b>		
Active	1,767	1,828
Retirees and Beneficiaries	1,240	1,193
Inactive, Vested	87	80
Inactive, Non-Vested	113	112
Inactive, active elsewhere in VRS	<u>210</u>	<u>211</u>
Total	3,417	3,424
Annual Covered Payroll	\$ 97,601	\$ 100,974
Annual Retirement Benefits	\$ 41,226	\$ 39,861
<b>Total Assets:</b>		
Actuarial Value	\$ 633,415	\$ 646,960
Market Value	533,962	484,119
Actuarial Accrued Liability	\$ 948,892	\$ 879,180
Unfunded Actuarial Accrued Liability (UAAL)	315,477	232,220
<b>RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING*</b>	<b>Informational Purposes</b>	<b>2011 &amp; 2012</b>
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	10.65 %	8.81 %
Amortization of UAAL	<u>22.66 %</u>	<u>16.75 %</u>
Annual Recommended Contribution	33.31 %	25.56 %
Amortization Period	20 years	20 years

\* The adopted contribution rates for fiscal years ending 2011 and 2012 are 7.76% and 7.73%, respectively.





Section I – Summary of Principal Results

**JUDICIAL  
(\$ IN THOUSANDS)**

VALUATION DATE	June 30, 2010	June 30, 2009
<b>Members:</b>		
Active	408	421
Retirees and Beneficiaries	463	450
Inactive, Vested	10	11
Inactive, Non-Vested	1	0
Inactive, active elsewhere in VRS	<u>3</u>	<u>5</u>
Total	885	887
Annual Covered Payroll	\$ 61,021	\$ 62,709
Annual Retirement Benefits	\$ 30,356	\$ 29,262
<b>Total Assets:</b>		
Actuarial Value	\$ 372,096	\$ 378,212
Market Value	314,794	283,934
Actuarial Accrued Liability	\$ 559,920	\$ 521,463
Unfunded Actuarial Accrued Liability (UAAL)	187,824	143,251
<b>RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING*</b>	<b>Informational Purposes</b>	<b>2011 &amp; 2012</b>
Employer Contribution Rate:		
Normal Cost (net of employee contributions)	33.55 %	30.15 %
Amortization of UAAL	<u>21.58 %</u>	<u>16.64 %</u>
Annual Recommended Contribution	55.13 %	46.79 %
Amortization Period	20 years	20 years

\* The adopted contribution rates for fiscal years ending 2011 and 2012 are 28.81% and 28.65%, respectively.



*Section I – Summary of Principal Results*

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

VALUATION DATE	June 30, 2010	June 30, 2009
<b>Members:</b>		
Active	9,734	10,087
Long Term Disability	0	1
Retirees and Beneficiaries	2,428	2,146
Inactive, Vested	482	459
Inactive, Non-Vested	2,633	2,549
Inactive, active elsewhere in VRS	<u>2,369</u>	<u>2,233</u>
Total	17,646	17,475
Annual Covered Payroll	\$ 346,040	\$ 359,070
Annual Retirement Benefits	\$ 51,498	\$ 45,763
<b>Total Assets:</b>		
Actuarial Value	\$ 925,443	\$ 912,922
Market Value	792,429	690,606
Actuarial Accrued Liability	\$ 1,579,321	\$ 1,411,844
Unfunded Actuarial Accrued Liability (UAAL)	653,878	498,922
<b>RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING*</b>	<b>Informational Purposes</b>	<b>2011 &amp; 2012</b>
<b>Employer Contribution Rate:</b>		
Normal Cost (net of employee contributions)	7.06 %	5.81 %
Amortization of UAAL	<u>13.25 %</u>	<u>10.12 %</u>
Annual Recommended Contribution	20.31 %	15.93 %
Amortization Period	20 years	20 years

\* The adopted contribution rates for fiscal years ending 2011 and 2012 are 5.12% and 5.07%, respectively.



## Section I – Summary of Principal Results

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2. Comments on the valuation results as of June 30, 2010 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 D and Schedule E of this report outline the full set of actuarial assumptions and methods used in the current valuation. Changes to the actuarial assumptions and methods since the previous valuation include changing the assumed annual rate of return from 7.5% to 7.0%.
  
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 F, were taken into account in the current valuation. There were no changes to the provisions since the previous valuation.



**Section II – Membership Data**

1. 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, 2010 on the basis of which the valuation was prepared.

**TABLE 1**

**THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2010 (\$ IN THOUSANDS)**

DIVISION	NUMBER	COMPENSATION
State Employees	76,033	\$3,514,396
Teachers	148,462	7,119,889
State Police	1,767	97,601
Judicial	408	61,021
Virginia Law Officers	<u>9,734</u>	<u>346,040</u>
Total	236,404	\$11,138,947

2. The following table shows a five-year history of active member valuation data.

**TABLE 2**

**SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA**

VALUATION DATE	NUMBER	ANNUAL PAYROLL (\$ IN THOUSANDS)	ANNUAL AVERAGE PAY	% CHANGE IN AVERAGE PAY
6/30/2010	236,404	\$ 11,138,947	\$ 47,118	(0.19)%
6/30/2009	239,437	11,303,073	47,207	2.11 %
6/30/2008	239,420	11,068,331	46,230	3.50 %
6/30/2007	236,693	10,571,538	44,664	4.50 %
6/30/2006	233,171	9,965,607	42,739	4.14 %



**Section II – Membership Data**

3. 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, 2010**  
**(\$ IN THOUSANDS)**

TYPE OF RETIREMENT	DIVISION					
	STATE EMPLOYEES	TEACHERS	STATE POLICE	JUDICIAL	VIRGINIA LAW OFFICERS	TOTAL
Service:						
Number	41,538	60,607	886	322	2,114	105,467
Annual Benefits	\$746,195	\$1,282,810	\$33,352	\$24,314	\$48,003	\$2,134,674
Disability:						
Number	4,718	4,131	192	1	186	9,228
Annual Benefits	\$67,781	\$82,462	\$5,473	\$98	\$2,532	\$158,346
Survivors:						
Number	4,344	2,196	162	140	128	6,970
Annual Benefits	\$47,386	\$27,891	\$2,401	\$5,944	\$963	\$84,585
Total:						
Number	50,600	66,934	1,240	463	2,428	121,665
Annual Benefits	\$861,362	\$1,393,163	\$41,226	\$30,356	\$51,498	\$2,377,605

4. The five tables of Schedule G, 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, appearing on pages 37 to 41, 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, 2010, 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, 2010 MARKET VALUE	JUNE 30, 2009 MARKET VALUE
State Employees	\$12,384,638	\$11,253,767
Teachers	21,517,178	19,302,368
State Police	533,962	484,119
Judicial	314,794	283,934
Virginia Law Officers	<u>792,429</u>	<u>690,606</u>
Total Market Value of Assets	\$35,543,001	\$32,014,794

- The five-year market related actuarial value of assets used for the current valuation is \$42,079,485,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2010. 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, 2010 ACTUARIAL VALUE	JUNE 30, 2009 ACTUARIAL VALUE
State Employees	\$14,700,854	\$15,049,901
Teachers	25,447,677	25,764,665
State Police	633,415	646,960
Judicial	372,096	378,212
Virginia Law Officers	<u>925,443</u>	<u>912,922</u>
Total Actuarial Value of Assets	\$42,079,485	\$42,752,660



## Section IV – Comments on Valuation

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### State Employees

1. The total valuation balance sheet on account of benefits as of June 30, 2010 shows that the State Employees plan has total prospective benefit liabilities of \$21,620,744,347, of which \$9,443,770,378 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$835,882,563 is for the prospective benefits payable on account of present inactive members, and \$11,341,091,406 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 \$14,700,854,000 as of June 30, 2010. The difference of \$6,919,890,347 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, \$1,316,115,993 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$5,603,774,354 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 3.64% of salary are required. This is net of the 5% employee contribution.
3. Prospective employer normal contributions at the above rate have a present value of \$765,175,588. When this amount is subtracted from \$5,603,774,354, which is the present value of the total future contributions to be made by the employers, there remains \$4,838,598,766 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 9.65% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$4,838,598,766 over 20 years on the assumption that the aggregate payroll for State employees will increase by 3% each year.



## Section IV – Comments on Valuation

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### Teachers

1. The total valuation balance sheet on account of benefits as of June 30, 2010 shows that the Teachers plan has total prospective benefit liabilities of \$43,508,039,407, of which \$17,185,808,283 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$750,098,432 is for the prospective benefits payable on account of present inactive members, and \$25,572,132,692 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 \$25,447,677,000 as of June 30, 2010. The difference of \$18,060,362,407 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, \$3,155,740,745 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$14,904,621,662 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 5.95% of salary are required. This is net of the 5% employee contribution.
3. Prospective employer normal contributions at the above rate have a present value of \$3,263,722,240. When this amount is subtracted from \$14,904,621,662, which is the present value of the total future contributions to be made by the employers, there remains \$11,640,899,422 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 11.46% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$11,640,899,422 over 20 years on the assumption that the aggregate payroll for Teachers will increase by 3% each year.





## Section IV – Comments on Valuation

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### **State Police (SPORS)**

1. The total valuation balance sheet on account of benefits as of June 30, 2010 shows that the SPORS plan has total prospective benefit liabilities of \$1,083,173,403, of which \$496,652,664 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$13,838,727 is for the prospective benefits payable on account of present inactive members, and \$572,682,012 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 \$633,415,000 as of June 30, 2010. The difference of \$449,758,403 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, \$42,610,311 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$407,148,092 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 10.65% of salary are required. This is net of the 5% employee contribution.
3. Prospective employer normal contributions at the above rate have a present value of \$91,671,444. When this amount is subtracted from \$407,148,092, which is the present value of the total future contributions to be made by the employers, there remains \$315,476,648 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 22.66% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$315,476,648 over 20 years on the assumption that the aggregate payroll for SPORS employees will increase by 3% each year.



## Section IV – Comments on Valuation

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### **Judicial**

1. The total valuation balance sheet on account of benefits as of June 30, 2010 shows that the Judicial plan has total prospective benefit liabilities of \$705,225,636, of which \$305,787,236 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$4,517,724 is for the prospective benefits payable on account of present inactive members, and \$394,920,676 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 \$372,096,000 as of June 30, 2010. The difference of \$333,129,636 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, \$20,076,689 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$313,052,947 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 33.55% of salary are required. This is net of the 5% employee contribution.
3. Prospective employer normal contributions at the above rate have a present value of \$125,228,617. When this amount is subtracted from \$313,052,947, which is the present value of the total future contributions to be made by the employers, there remains \$187,824,330 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 21.58% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$187,824,330 over 20 years on the assumption that the aggregate payroll for Judicial employees will increase by 3% each year.



## Section IV – Comments on Valuation

### **Virginia Law Officers (VaLORS)**

1. The total valuation balance sheet on account of benefits as of June 30, 2010 shows that VaLORS has total prospective benefit liabilities of \$1,837,532,782, of which \$614,544,537 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$67,832,965 is for the prospective benefits payable on account of present inactive members, and \$1,155,155,280 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 \$925,443,000 as of June 30, 2010. The difference of \$912,089,782 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, \$118,615,741 is the present value of future contributions expected to be made by members (at the rate of 5% of salary), and the balance of \$793,474,041 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 7.06% of salary are required. This is net of the 5% employee contribution.
3. Prospective employer normal contributions at the above rate have a present value of \$139,596,474. When this amount is subtracted from \$793,474,041, which is the present value of the total future contributions to be made by the employers, there remains \$653,877,567 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 13.25% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$653,877,567 over 20 years on the assumption that the aggregate payroll for VaLORS employees will increase by 3% each year.



**Section V – Contribution Rates**

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1. The actuarially determined employer contribution rates for each division based on the June 30, 2010 actuarial valuation are shown in the following table:

**TABLE 6**

Division	Employer Contribution Rate
State Employees	13.29%
Teachers	17.41
State Police	33.31
Judicial	55.13
Virginia Law Officers	20.31

The 5% member contribution payable by the employers is in addition to the rates above.



**Section V – Contribution Rates**

2. The table below shows the development of the normal contribution rate, the unfunded accrued liability (UAL), amortization period and the actuarially recommended contribution rate with a 20-year amortization period for each division as of June 30, 2010.

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

	State Employees	Teachers	State Police	Judicial	Virginia Law Officers
<u>Contribution for</u>					
Normal Cost					
Service Retirement Benefits	6.69%	9.02%	12.55%	33.51%	8.52%
Disability Benefits	0.68%	0.66%	1.09%	3.17%	0.53%
Survivor Benefits	0.41%	0.30%	0.71%	1.87%	0.57%
Separation Benefits	<u>0.86%</u>	<u>0.97%</u>	<u>1.30%</u>	<u>0.00%</u>	<u>2.44%</u>
Total	8.64%	10.95%	15.65%	38.55%	12.06%
Member Current Contributions	<u>5.00%</u>	<u>5.00%</u>	<u>5.00%</u>	<u>5.00%</u>	<u>5.00%</u>
Employer Normal Cost	3.64%	5.95%	10.65%	33.55%	7.06%
Amortization of Unfunded Actuarial Accrued Liability (UAAL)	9.65%	11.46%	22.66%	21.58%	13.25%
Number of Years to Amortize UAAL	20 years	20 years	20 years	20 years	20 years
Actuarially Recommended Employer Contribution Rate to pay Normal Cost and amortize UAAL	13.29%	17.41%	33.31%	55.13%	20.31%



**Section VI – Accounting Information**

- Governmental Accounting Standards Board Statements 25 and 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, 2010**

GROUP	COUNT				
	State Employees	Teachers	State Police	Judicial	Virginia Law Officers
Active Members	76,033	148,462	1,767	408	9,734
LTD	2,573	0	0	0	0
<b>Total Active Members</b>	<b>78,606</b>	<b>148,462</b>	<b>1,767</b>	<b>408</b>	<b>9,734</b>
Inactive Members					
Vested	9,806	16,393	87	10	482
Non-Vested	18,792	27,020	113	1	2,633
Active Elsewhere in VRS	9,682	5,237	210	3	2,369
<b>Total Inactive Members</b>	<b>38,280</b>	<b>48,650</b>	<b>410</b>	<b>14</b>	<b>5,484</b>
Retirees					
Service	41,538	60,607	886	322	2,114
Disabled	4,718	4,131	192	1	186
Beneficiaries	4,344	2,196	162	140	128
<b>Total Retirees</b>	<b>50,600</b>	<b>66,934</b>	<b>1,240</b>	<b>463</b>	<b>2,428</b>
<b>Totals</b>	<b>167,486</b>	<b>264,046</b>	<b>3,417</b>	<b>885</b>	<b>17,646</b>



**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 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)
<b>STATE EMPLOYEES</b>						
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 %
6/30/2008	15,046,348	17,096,942	2,050,594	88.0 %	3,640,692	56.3 %
6/30/2007	13,857,342	16,279,781	2,422,439	85.1 %	3,467,388	69.9 %
6/30/2006	12,542,390	15,064,062	2,521,672	83.3 %	3,301,286	76.4 %
6/30/2005	12,018,175	14,007,274	1,989,099	85.8 %	3,100,479	64.2 %
<b>TEACHERS</b>						
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 %
6/30/2008	25,502,482	31,958,321	6,455,839	79.8 %	6,896,432	93.6 %
6/30/2007	23,204,871	29,669,838	6,464,967	78.2 %	6,604,643	97.9 %
6/30/2006	20,731,192	27,274,064	6,542,872	76.0 %	6,195,421	105.6 %
6/30/2005	19,639,994	25,205,725	5,565,731	77.9 %	5,844,860	95.2 %
<b>STATE POLICE</b>						
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 %
6/30/2008	646,277	844,195	197,918	76.6 %	102,466	193.2 %
6/30/2007	594,985	806,028	211,043	73.8 %	100,785	209.4 %
6/30/2006	538,646	729,927	191,281	73.8 %	93,742	204.1 %
6/30/2005	514,330	673,173	158,843	76.4 %	90,865	174.8 %
<b>JUDICIAL</b>						
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 %
6/30/2008	373,850	494,768	120,918	75.6 %	60,486	199.9 %
6/30/2007	340,200	442,498	102,298	76.9 %	57,687	177.3 %
6/30/2006	302,734	424,398	121,664	71.3 %	54,289	224.1 %
6/30/2005	287,825	402,301	114,476	71.5 %	51,874	220.7 %
<b>VIRGINIA LAW OFFICERS</b>						
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 %
6/30/2008	873,473	1,281,477	408,004	68.2 %	368,255	110.8 %
6/30/2007	766,243	1,165,979	399,736	65.7 %	341,035	117.2 %
6/30/2006	656,668	1,096,368	439,700	59.9 %	320,869	137.0 %
6/30/2005	575,327	980,097	404,770	58.7 %	306,574	132.0 %



**Section VI – Accounting Information**

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010.

	State Employees	Teachers	State Police	Judicial	Virginia Law Officers
Valuation Date	6/30/2010	6/30/2010	6/30/2010	6/30/2010	6/30/2010
Actuarial cost method	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
Payroll Growth Rate	3.00%	3.00%	3.00%	3.00%	3.00%
Remaining amortization period	20 years	20 years	20 years	20 years	20 years
Asset valuation method	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%
Projected salary increases*	3.75 – 5.60%	3.75 – 6.20%	3.50 – 4.75%	4.50%	3.50 – 4.75%
Post-Retirement Benefit Increases:	2.50% compounded annually	2.50% compounded annually	2.50% compounded annually	2.50% compounded annually	2.50% compounded annually

\*Includes inflation at 2.50%.





Section VI – Accounting Information

**SCHEDULE OF ADOPTED EMPLOYER CONTRIBUTIONS**

Fiscal Year	Annual Required Contribution (ARC)*	Percent of ARC Contributed
<b>State Employees</b>		
2010	6.26 %	100 %
2009	6.23 %	100 %
2008	5.74 %	100 %
2007	5.74 %	100 %
2006	3.91 %	100 %
<b>Teachers</b>		
2010	8.81 %	100 %
2009	8.81 %	100 %
2008	9.20 %	100 %
2007	9.20 %	100 %
2006	6.62 %	100 %
<b>State Police</b>		
2010	20.05 %	100 %
2009	20.05 %	100 %
2008	16.71 %	100 %
2007	16.71 %	100 %
2006	16.49 %	100 %
<b>Judicial</b>		
2010	34.51 %	100 %
2009	34.51 %	100 %
2008	36.47 %	100 %
2007	36.47 %	100 %
2006	30.55 %	100 %
<b>Virginia Law Officers</b>		
2010	14.23 %	100 %
2009	14.23 %	100 %
2008	14.96 %	100 %
2007	14.96 %	100 %
2006	16.99 %	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.



Section VII – Derivation of Experience Gains and Losses

**CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)  
DURING FISCAL YEAR 2010  
(\$ IN THOUSANDS)**

	State Employees	Teachers	State Police	Judicial	Virginia Law Officers	Local Agencies	Total
<b>A. Calculation of Expected Unfunded Actuarial Accrued Liability</b>							
1. UAAL as of June 30, 2009	\$ 2,875,978	\$ 8,095,849	\$ 232,220	\$ 143,251	\$ 498,922	\$ 2,166,406	\$14,012,626
2. Normal Cost for previous year	277,640	693,290	13,949	22,040	38,804	453,305	1,499,029
3. Actual contributions during the year	(359,827)	(820,193)	(20,747)	(20,206)	(56,347)	(583,863)	(1,861,183)
4. Interest at previous year's rate of 7.5%							
a. on UAAL	215,698	607,189	17,417	10,744	37,419	162,480	1,050,947
b. on normal cost	20,823	51,997	1,046	1,653	2,910	33,998	112,427
c. on contributions	(13,494)	(30,757)	(778)	(758)	(2,113)	(21,895)	(69,795)
d. total: (a)+(b)+(c)	\$ 223,027	\$ 628,429	\$ 17,685	\$ 11,639	\$ 38,216	\$ 174,583	\$ 1,093,579
5. Expected UAAL as of June 30, 2010: A1+A2+A3+A4	3,016,818	8,597,375	243,107	156,724	519,595	2,210,431	14,744,051
6. Actual UAAL as of June 30, 2010	4,838,599	11,640,899	315,477	187,824	653,878	3,592,328	21,229,005
7. Total Gain/(Loss): A5-A6	\$ (1,821,781)	\$ (3,043,524)	\$ (72,370)	\$ (31,100)	\$ (134,283)	\$ (1,381,897)	\$ (6,484,954)
<b>B. Calculation of Asset Gain/(Loss)</b>							
1. Actuarial Value of Assets (AVA) as of June 30, 2009	\$15,049,901	\$ 25,764,665	\$ 646,960	\$ 378,212	\$ 912,922	\$12,370,467	\$55,123,127
2. Contributions during the year	359,827	820,193	20,747	20,206	56,347	583,863	1,861,183
3. Benefit payments during the year	(922,417)	(1,495,918)	(43,210)	(31,598)	(57,677)	(577,541)	(3,128,361)
4. Interest at previous year's rate of 7.5%							
a. on AVA at beginning of year	1,128,743	1,932,350	48,522	28,366	68,469	927,785	4,134,235
b. on contributions	13,494	30,757	778	758	2,113	21,895	69,795
c. on benefit payments	(34,591)	(56,097)	(1,620)	(1,185)	(2,163)	(21,658)	(117,314)
d. total: (a)+(b)+(c)	\$ 1,107,646	\$ 1,907,010	\$ 47,680	\$ 27,939	\$ 68,419	\$ 928,022	\$ 4,086,716
5. Expected AVA as of June 30, 2010: B1+B2+B3+B4	15,594,957	26,995,950	672,177	394,759	980,011	13,304,811	57,942,665
6. Actual AVA as of June 30, 2010	14,700,854	25,447,677	633,415	372,096	925,443	12,580,044	54,659,529
7. Gain/(Loss) on assets: B6-B5	\$ (894,103)	\$ (1,548,273)	\$ (38,762)	\$ (22,663)	\$ (54,568)	\$ (724,767)	\$ (3,283,136)
<b>C. Calculation of Liability Gain/(Loss)</b>							
1. Gain/(Loss) due to changes in actuarial assumptions	\$ (1,085,578)	\$ (2,271,067)	\$ (53,864)	\$ (23,894)	\$ (102,086)	\$ (1,001,695)	\$ (4,538,184)
2. Gain/(Loss) due to plan amendments	0	0	0	0	0	(1,957)	(1,957)
3. Gain/(Loss) due to change in methods	0	0	0	0	0	0	0
4. Liability Experience Gain/(Loss): A7-B7-C1-C2	\$ 157,900	\$ 775,816	\$ 20,256	\$ 15,457	\$ 22,372	\$ 346,522	\$ 1,338,323

\* Required Employer Contributions are based on the Annual Required Contribution (ARC) as of the previous valuation date. The ARC is based on amortizing the UAAL over 20 years.



Section VII – Derivation of Experience Gains and Losses

**GAINS & LOSSES  
DURING FISCAL YEAR 2010  
(\$ IN MILLIONS)**

Type of Activity	State Employees	Teachers	State Police	Judges	Virginia Law Officers
<b>Age &amp; Service Retirements.</b> If members retire at older ages, there is a gain. If younger ages, a loss.	(\$79.2)	\$64.0	\$4.6	\$4.8	(\$7.4)
<b>Disability Before Retirement.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	(\$15.7)	\$15.0	(\$1.2)	\$1.6	(\$1.3)
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	\$1.5	(\$9.0)	\$0.3	\$0.2	\$1.0
<b>Withdrawal from Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(\$47.7)	(\$185.1)	(\$1.7)	\$0.1	(\$4.7)
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	\$238.9	\$561.4	\$8.8	\$6.7	\$22.0
<b>New Members.</b> Additional unfunded accrued liability will produce a loss.	(\$3.9)	(\$34.5)	(\$0.4)	(\$0.1)	(\$0.4)
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(\$894.1)	(\$1,548.3)	(\$38.8)	(\$22.7)	(\$54.6)
<b>Death after Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.	(\$26.3)	(\$16.1)	(\$1.3)	(\$2.5)	\$0.6
<b>Other.</b> Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	\$90.3	\$380.2	\$11.2	\$4.7	\$12.6
<b>Gain or (Loss) During Year</b>	(\$736.2)	(\$772.4)	(\$18.5)	(\$7.2)	(\$32.2)
<b>Non-Recurring Items.</b> Adjustments for plan amendments, assumption changes, etc.	(1,085.6)	(2,271.1)	(53.9)	(23.9)	(102.1)
<b>Composite Gain or (Loss) During Year</b>	(\$1,821.8)	(\$3,043.5)	(\$72.4)	(\$31.1)	(\$134.3)



Schedule A – Balance Sheet

**STATE EMPLOYEES  
AS OF JUNE 30, 2010**

<b>PRESENT AND PROSPECTIVE ASSETS</b>		
Actuarial Value of Assets		\$ 14,700,854,000
Present value of future members' contributions		1,316,115,993
Present value of future employer contributions		
Normal contributions	\$ 765,175,588	
Unfunded accrued liability contributions	<u>4,838,598,766</u>	
Total prospective employer contributions		<u>5,603,774,354</u>
Total Present and Prospective Assets		<u>\$ 21,620,744,347</u>
<b>ACTUARIAL LIABILITIES</b>		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 9,443,770,378
Present value of prospective benefits payable on account of inactive members		835,882,563
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$10,236,436,580	
Disability retirement benefits	446,409,730	
Survivor benefits	409,357,720	
Separation benefits	<u>248,887,376</u>	
Total		<u>11,341,091,406</u>
Total Actuarial Liabilities		<u>\$ 21,620,744,347</u>



Schedule A – Balance Sheet

**TEACHERS**  
**AS OF JUNE 30, 2010**

<b>PRESENT AND PROSPECTIVE ASSETS</b>		
Actuarial Value of Assets		\$ 25,447,677,000
Present value of future members' contributions		3,155,740,745
Present value of future employer contributions		
Normal contributions	\$ 3,263,722,240	
Unfunded accrued liability contributions	<u>11,640,899,422</u>	
Total prospective employer contributions		<u>14,904,621,662</u>
Total Present and Prospective Assets		<u>\$ 43,508,039,407</u>
<b>ACTUARIAL LIABILITIES</b>		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 17,185,808,283
Present value of prospective benefits payable on account of inactive members		750,098,432
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 23,468,798,057	
Disability retirement benefits	827,203,632	
Survivor benefits	572,404,613	
Separation benefits	<u>703,726,390</u>	
Total		<u>25,572,132,692</u>
Total Actuarial Liabilities		<u>\$ 43,508,039,407</u>



Schedule A – Balance Sheet

**STATE POLICE  
AS OF JUNE 30, 2010**

<b>PRESENT AND PROSPECTIVE ASSETS</b>		
Actuarial Value of Assets		\$ 633,415,000
Present value of future members' contributions		42,610,311
Present value of future employer contributions		
Normal contributions	\$ 91,671,444	
Unfunded accrued liability contributions	<u>315,476,648</u>	
Total prospective employer contributions		<u>407,148,092</u>
Total Present and Prospective Assets		<u>\$ 1,083,173,403</u>
<b>ACTUARIAL LIABILITIES</b>		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 496,652,664
Present value of prospective benefits payable on account of inactive members		13,838,727
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 510,442,812	
Disability retirement benefits	24,559,551	
Survivor benefits	14,442,911	
Separation benefits	<u>23,236,738</u>	
Total		<u>572,682,012</u>
Total Actuarial Liabilities		<u>\$ 1,083,173,403</u>



Schedule A – Balance Sheet

**JUDICIAL**  
**AS OF JUNE 30, 2010**

<b>PRESENT AND PROSPECTIVE ASSETS</b>		
Actuarial Value of Assets	\$	372,096,000
Present value of future members' contributions		20,076,689
Present value of future employer contributions		
Normal contributions	\$ 125,228,617	
Unfunded accrued liability contributions	<u>187,824,330</u>	
Total prospective employer contributions		<u>313,052,947</u>
Total Present and Prospective Assets	\$	<u><u>705,225,636</u></u>
<b>ACTUARIAL LIABILITIES</b>		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits	\$	305,787,236
Present value of prospective benefits payable on account of inactive members		4,517,724
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 363,316,526	
Disability retirement benefits	15,840,918	
Survivor benefits	15,763,232	
Separation benefits	<u>-</u>	
Total		<u>394,920,676</u>
Total Actuarial Liabilities	\$	<u><u>705,225,636</u></u>



*Schedule A – Balance Sheet*

**VIRGINIA LAW OFFICERS  
AS OF JUNE 30, 2010**

<b>PRESENT AND PROSPECTIVE ASSETS</b>		
Actuarial Value of Assets		\$ 925,443,000
Present value of future members' contributions		118,615,741
Present value of future employer contributions		
Normal contributions	\$ 139,596,474	
Unfunded accrued liability contributions	<u>653,877,567</u>	
Total prospective employer contributions		<u>793,474,041</u>
Total Present and Prospective Assets		<u>\$ 1,837,532,782</u>
<b>ACTUARIAL LIABILITIES</b>		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 614,544,537
Present value of prospective benefits payable on account of inactive members		67,832,965
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 959,769,805	
Disability retirement benefits	31,614,173	
Survivor benefits	31,712,838	
Separation benefits	<u>132,058,464</u>	
Total		<u>1,155,155,280</u>
Total Actuarial Liabilities		<u>\$ 1,837,532,782</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)
6/30/2010	\$9,246,421	\$35,117,915	\$28,436,065	\$72,800,401	\$52,728,575	100.00%	100.00%	29.41%
6/30/2009	8,876,564	31,589,747	25,856,699	66,323,010	53,185,033	100.00	100.00	49.19
6/30/2008	8,389,773	29,225,652	24,939,054	62,554,479	52,548,375	100.00	100.00	59.88
6/30/2007	8,154,046	26,339,386	23,623,041	58,116,473	47,815,450	100.00	100.00	56.39
6/30/2006	6,988,172	23,055,815	22,777,916	52,821,903	42,668,752	100.00	100.00	55.43

**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)
6/30/2010	\$2,511,650	\$10,279,653	\$6,748,150	\$19,539,453	\$14,700,854	100.00%	100.00%	28.30%
6/30/2009	2,501,163	9,024,592	6,400,124	17,925,879	15,049,901	100.00	100.00	55.06
6/30/2008	2,398,033	8,411,441	6,287,468	17,096,942	15,046,348	100.00	100.00	67.39
6/30/2007	2,361,187	7,707,539	6,211,055	16,279,781	13,857,242	100.00	100.00	61.00
6/30/2006	2,023,931	6,865,383	6,174,748	15,064,062	12,542,390	100.00	100.00	59.16



**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)
6/30/2010	\$4,376,385	\$17,935,907	\$14,776,284	\$37,088,576	\$25,447,677	100.00%	100.00%	21.22%
6/30/2009	4,155,034	16,383,311	13,322,169	33,860,514	25,764,665	100.00	100.00	39.23
6/30/2008	3,922,647	15,181,246	12,854,428	31,958,321	25,502,482	100.00	100.00	49.78
6/30/2007	3,826,300	13,670,111	12,173,427	29,669,838	23,204,871	100.00	100.00	46.89
6/30/2006	3,284,393	12,086,579	11,903,092	27,274,064	20,731,192	100.00	100.00	45.03

**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)
6/30/2010	\$2,358,386	\$6,902,355	\$6,911,631	\$16,172,372	\$12,580,044	100.00%	100.00%	48.02%
6/30/2009	2,220,367	6,181,844	6,134,406	14,536,617	12,370,467	100.00	100.00	64.69
6/30/2008	2,069,093	5,632,966	5,797,158	13,499,217	11,999,545	100.00	100.00	74.13
6/30/2007	1,966,559	4,961,736	5,238,559	12,166,854	10,753,337	100.00	100.00	73.02
6/30/2006	1,679,848	4,103,853	4,700,076	10,483,777	9,395,170	100.00	100.00	76.84



**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)
6/30/2010	\$77,759	\$510,491	\$360,642	\$948,892	\$633,415	100.00%	100.00%	12.52%
6/30/2009	74,662	474,622	329,896	879,180	646,960	100.00	100.00	29.61
6/30/2008	71,160	444,025	329,010	844,195	646,277	100.00	100.00	39.84
6/30/2007	70,796	408,085	327,147	806,028	594,985	100.00	100.00	35.49
6/30/2006	66,055	378,636	285,236	729,927	538,646	100.00	100.00	32.94

**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)
6/30/2010	\$43,217	\$310,305	\$206,398	\$559,920	\$372,096	100.00%	100.00%	9.00%
6/30/2009	41,793	287,543	192,127	521,463	378,212	100.00	100.00	25.44
6/30/2008	38,785	271,276	184,707	494,768	373,850	100.00	100.00	34.54
6/30/2007	38,675	242,825	160,998	442,498	340,200	100.00	100.00	36.46
6/30/2006	34,756	240,005	149,637	424,398	302,734	100.00	100.00	18.69



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)
6/30/2010	\$186,792	\$682,378	\$710,151	\$1,579,321	\$925,443	100.00%	100.00%	7.92%
6/30/2009	181,760	581,887	648,197	1,411,844	912,922	100.00	100.00	23.03
6/30/2008	173,039	510,878	597,560	1,281,477	873,473	100.00	100.00	31.72
6/30/2007	169,393	458,383	538,203	1,165,979	766,243	100.00	100.00	25.73
6/30/2006	156,310	412,767	527,291	1,096,368	656,668	100.00	100.00	16.61

**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)
6/30/2010	\$9,554,189	\$36,621,088	\$29,713,256	\$75,888,534	\$54,659,529	100.00%	100.00%	28.55%
6/30/2009	9,174,779	32,933,799	27,026,919	69,135,497	55,123,127	100.00	100.00	48.15
6/30/2008	8,672,757	30,451,831	26,050,331	65,174,919	54,441,975	100.00	100.00	58.80
6/30/2007	8,432,910	27,448,679	24,649,389	60,530,978	49,516,878	100.00	100.00	55.32
6/30/2006	7,245,293	24,087,223	23,740,080	55,072,596	44,166,800	100.00	100.00	54.06



*Schedule B – Development of Actuarial Value of Assets*

**STATE EMPLOYEES  
FOR THE YEAR ENDING JUNE 30, 2010  
(\$ IN THOUSANDS)**

(1) Actuarial Value Beginning of Year	\$	15,049,901
(2) Market Value End of Year	\$	12,384,638
(3) Market Value Beginning of Year	\$	11,253,767
(4) Cash Flow		
a. Contributions	\$	359,827
b. Benefit Payments		(922,417)
c. Administrative Expenses		(10,138)
d. Net Transfers		(88)
e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(572,816)
(5) Investment Income		
a. Market total: (2) – (3) – (4)e	\$	1,703,687
b. Assumed Rate		7.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	833,071
d. Amount for Phased-in Recognition: (5)a – (5)c	\$	870,616
(6) Phased-In Recognition of Investment Income		
a. Current Year: 0.20 x (5)d	\$	174,123
b. First Prior Year		(860,345)
c. Second Prior Year		(392,887)
d. Third Prior Year		354,099
e. Fourth Prior Year		115,708
f. Total Recognized Investment Gain	\$	(609,302)
(7) Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	14,700,854



*Schedule B – Development of Actuarial Value of Assets*

**TEACHERS**  
**FOR THE YEAR ENDING JUNE 30, 2010**  
**(\$ IN THOUSANDS)**

(1) Actuarial Value Beginning of Year	\$	25,764,665
(2) Market Value End of Year	\$	21,517,178
(3) Market Value Beginning of Year	\$	19,302,368
(4) Cash Flow		
a. Contributions	\$	820,193
b. Benefit Payments		(1,495,918)
c. Administrative Expenses		(17,281)
d. Net Transfers		69
e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(692,937)
(5) Investment Income		
a. Market total: (2) – (3) – (4)e	\$	2,907,747
b. Assumed Rate		7.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	1,439,622
d. Amount for Phased-in Recognition: (5)a – (5)c	\$	1,468,125
(6) Phased-In Recognition of Investment Income		
a. Current Year: 0.20 x (5)d	\$	293,625
b. First Prior Year		(1,451,149)
c. Second Prior Year		(660,590)
d. Third Prior Year		569,629
e. Fourth Prior Year		184,812
f. Total Recognized Investment Gain	\$	(1,063,673)
(7) Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	25,447,677



*Schedule B – Development of Actuarial Value of Assets*

**STATE POLICE**  
**FOR THE YEAR ENDING JUNE 30, 2010**  
**(\$ IN THOUSANDS)**

(1) Actuarial Value Beginning of Year	\$	646,960
(2) Market Value End of Year	\$	533,962
(3) Market Value Beginning of Year	\$	484,119
(4) Cash Flow		
a. Contributions	\$	20,747
b. Benefit Payments		(43,210)
c. Administrative Expenses		(414)
d. Net Transfers		-
e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(22,877)
(5) Investment Income		
a. Market total: (2) – (3) – (4)e	\$	72,720
b. Assumed Rate		7.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	35,881
d. Amount for Phased-in Recognition: (5)a – (5)c	\$	36,839
(6) Phased-In Recognition of Investment Income		
a. Current Year: 0.20 x (5)d	\$	7,368
b. First Prior Year		(36,662)
c. Second Prior Year		(16,888)
d. Third Prior Year		14,837
e. Fourth Prior Year		4,796
f. Total Recognized Investment Gain	\$	(26,549)
(7) Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	633,415



*Schedule B – Development of Actuarial Value of Assets*

**JUDICIAL**  
**FOR THE YEAR ENDING JUNE 30, 2010**  
**(\$ IN THOUSANDS)**

(1) Actuarial Value Beginning of Year	\$	378,212
(2) Market Value End of Year	\$	314,794
(3) Market Value Beginning of Year	\$	283,934
(4) Cash Flow		
a. Contributions	\$	20,206
b. Benefit Payments		(31,598)
c. Administrative Expenses		(243)
d. Net Transfers		-
e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(11,635)
(5) Investment Income		
a. Market total: (2) – (3) – (4)e	\$	42,495
b. Assumed Rate		7.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	21,111
d. Amount for Phased-in Recognition: (5)a – (5)c	\$	21,384
(6) Phased-In Recognition of Investment Income		
a. Current Year: 0.20 x (5)d	\$	4,277
b. First Prior Year		(21,088)
c. Second Prior Year		(9,717)
d. Third Prior Year		8,288
e. Fourth Prior Year		2,648
f. Total Recognized Investment Gain	\$	(15,592)
(7) Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	372,096





*Schedule B – Development of Actuarial Value of Assets*

**VIRGINIA LAW OFFICERS  
FOR THE YEAR ENDING JUNE 30, 2010  
(\$ IN THOUSANDS)**

(1)	Actuarial Value Beginning of Year	\$	912,922
(2)	Market Value End of Year	\$	792,429
(3)	Market Value Beginning of Year	\$	690,606
(4)	Cash Flow		
	a. Contributions	\$	56,347
	b. Benefit Payments		(57,677)
	c. Administrative Expenses		(597)
	d. Net Transfers		104
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(1,823)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	103,646
	b. Assumed Rate		7.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e - (4)c] x (5)b x 0.5] - (4)c	\$	52,346
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	51,300
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	\$	10,260
	b. First Prior Year		(49,227)
	c. Second Prior Year		(22,173)
	d. Third Prior Year		17,972
	e. Fourth Prior Year		5,166
	f. Total Recognized Investment Gain	\$	(38,002)
(7)	Actuarial Value End of Year: [(1) + (4) + (5)c + (6)f]	\$	925,443



Schedule C – Summary of Changes in Net Assets

**STATE EMPLOYEES  
FOR THE YEAR ENDING JUNE 30, 2010  
(\$ IN THOUSANDS)**

Additions for the Year

Contributions:		
Members	\$	5,155
Members (paid by employer)		177,891
Employers		<u>176,781</u>
Total	\$	359,827
Miscellaneous Revenue		31
Net Investment Income		<u>1,703,687</u>
TOTAL	\$	<u>2,063,545</u>

Deductions for the Year

Benefit Payments	\$	898,226
Refunds		24,191
Transfers		119
Administrative Expenses		<u>10,138</u>
TOTAL	\$	<u>932,674</u>

Excess of Additions Over Deductions \$ 1,130,871

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2009	\$	11,253,767
Excess of Additions over Deductions		<u>1,130,871</u>
Market Value of Assets as of 6/30/2010*	\$	<u>12,384,638</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, 2010  
(\$ IN THOUSANDS)**

Additions for the Year

Contributions:		
Members	\$	6,070
Members (paid by employer)		354,490
Employers		<u>459,633</u>
Total	\$	820,193
Miscellaneous Revenue		54
Net Investment Income		<u>2,907,747</u>
TOTAL	\$	<u>3,727,994</u>

Deductions for the Year

Benefit Payments	\$	1,462,638
Refunds		33,280
Transfers		(15)
Administrative Expenses		<u>17,281</u>
TOTAL	\$	<u>1,513,184</u>

Excess of Additions Over Deductions \$ 2,214,810

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2009	\$	19,302,368
Excess of Additions over Deductions		<u>2,214,810</u>
Market Value of Assets as of 6/30/2010*	\$	<u>21,517,178</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, 2010  
(\$ IN THOUSANDS)**

Additions for the Year

Contributions:	
Members	\$ 47
Members (paid by employer)	4,945
Employers	<u>15,755</u>
Total	\$ 20,747
Miscellaneous Revenue	-
Net Investment Income	<u>72,720</u>
TOTAL	\$ <u>93,467</u>

Deductions for the Year

Benefit Payments	\$ 42,714
Refunds	496
Transfers	-
Administrative Expenses	<u>414</u>
TOTAL	\$ <u>43,624</u>

Excess of Additions Over Deductions \$ 49,843

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2009	\$ 484,119
Excess of Additions over Deductions	<u>49,843</u>
Market Value of Assets as of 6/30/2010*	<u>\$ 533,962</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, 2010  
(\$ IN THOUSANDS)**

Additions for the Year

Contributions:	
Members	\$ 30
Members (paid by employer)	3,108
Employers	<u>17,068</u>
Total	\$ 20,206
Miscellaneous Revenue	-
Net Investment Income	<u>42,495</u>
TOTAL	\$ 62,701

Deductions for the Year

Benefit Payments	\$ 31,598
Refunds	-
Transfers	-
Administrative Expenses	<u>243</u>
TOTAL	\$ 31,841

Excess of Additions Over Deductions \$ 30,860

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2009	\$ 283,934
Excess of Additions over Deductions	<u>30,860</u>
Market Value of Assets as of 6/30/2010*	<u>\$ 314,794</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, 2010  
(\$ IN THOUSANDS)**

Additions for the Year

Contributions:

Members	\$	196
Members (paid by employer)		17,208
Employers		<u>38,943</u>

Total \$ 56,347

Miscellaneous Revenue -

Net Investment Income 103,646

TOTAL \$ 159,993

Deductions for the Year

Benefit Payments	\$	53,758
Refunds		3,919
Transfers		(104)
Administrative Expenses		<u>597</u>

TOTAL \$ 58,170

Excess of Additions Over Deductions \$ 101,823

Reconciliation of Asset Balances

Market Value of Assets as of 6/30/2009	\$	690,606
Excess of Additions over Deductions		<u>101,823</u>
Market Value of Assets as of 6/30/2010*	\$	<u>792,429</u>

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



Schedule D – Outline of Actuarial Assumptions and Methods

**Assumptions and Methods which apply to all VRS Plans**

<b>Investment Return Rate:</b>	7.00% per annum, compounded annually (net of administrative expenses).
<b>Inflation Assumption:</b>	2.50% per year.
<b>Actuarial Cost Method:</b>	Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. See Section E for a detailed explanation.
<b>Funding Period:</b>	20 years from valuation date (open amortization, computed as level percent of payroll).
<b>Payroll Growth Rate:</b>	3% per annum.
<b>Asset Valuation Method:</b>	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.
<b>Cost-of-living Increase:</b>	2.5% per year compounded annually. The temporary supplement for SPORS and VaLORS members is assumed to be adjusted biennially based on increases of 2.5% per annum compounded annually.
<b>Percent Electing a Deferred Termination Benefit:</b>	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.
<b>Marriage Assumption:</b>	100% of active employees are assumed to be married, with spouses the same age as participants.



Schedule D – State Employees’ Actuarial Assumptions and Methods

**STATE EMPLOYEES**  
**Plan Specific Assumptions and Methods**

**MORTALITY RATES:**

Pre-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Disablement:

70% of PBGC Disabled Mortality Table 5a for Males.  
90% of PBGC Disabled Mortality Table 6a for Females.

Mortality Rates				
Age	Male		Female	
	Pre- and Post-retirement	Post-disablement	Pre- and Post-retirement	Post-disablement
20	0.0484%	3.3810%	0.0280%	2.3670%
25	0.0624	3.3810	0.0291	2.3670
30	0.0779	2.5340	0.0331	2.1330
35	0.0849	1.9460	0.0449	1.9260
40	0.0999	1.9740	0.0652	1.8810
45	0.1458	2.2540	0.0923	2.0160
50	0.2326	2.6810	0.1310	2.3130
55	0.3979	3.3740	0.2084	2.6550
60	0.7090	4.2210	0.3863	2.9790
65	1.2940	4.7460	0.7621	3.3300
70	2.1729	5.1730	1.2709	3.6990
75	3.4051	5.8940	2.0381	4.4280
80	5.5861	7.8960	3.5362	6.7140
85	8.9613	11.7740	6.0979	10.1520
90	13.9452	17.6750	10.4594	15.1380

14% of pre-retirement deaths are assumed to be service related.





**Schedule D – State Employees’ Actuarial Assumptions and Methods**

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

Separations from Active Service due to Retirement				
Percentage of Members Separating within the Next Year				
Age	Male		Female	
	Less than 30 Years of Service	More than 30 Years of Service	Less than 30 Years of Service	More than 30 Years of Service
<=49	0.00%	0.00%	0.00%	0.00%
50	3.00	10.00	3.22	10.00
51	3.00	10.00	3.07	10.00
52	3.00	10.00	3.00	10.00
53	3.00	10.00	3.00	10.00
54	3.00	10.00	3.50	10.00
55	5.00	10.00	5.00	10.00
56	5.00	10.00	5.00	10.00
57	4.50	10.00	4.50	10.00
58	4.00	10.00	5.50	10.00
59	5.00	10.00	5.50	10.00
60	5.00	10.00	5.50	15.00
61	10.00	15.00	10.00	20.00
62	15.00	25.00	15.00	30.00
63	15.00	20.00	15.00	20.00
64	15.00	20.00	15.00	20.00
65	40.00	30.00	40.00	40.00
66	40.00	25.00	40.00	30.00
67	40.00	25.00	40.00	25.00
68	40.00	20.00	40.00	25.00
69	40.00	20.00	40.00	20.00
>=70	100.00	100.00	100.00	100.00



Schedule D – State Employees' Actuarial Assumptions and Methods

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

Separations from Active Service due to Disability Percentage of Members Separating within the Next Year		
Age	Male	Female
20	0.1000%	0.0100%
25	0.1000	0.1000
30	0.2000	0.1500
35	0.2000	0.2500
40	0.2000	0.2900
45	0.4000	0.3400
50	0.5000	0.5500
55	0.6000	0.8100
60	0.8000	1.0000
65	0.7000	0.9000



**Schedule D – State Employees’ Actuarial Assumptions and Methods**

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

Separations from Active Service due to Termination Percentage of Male Members Separating within the Next Year												
Age	Years of Service											
	0	1	2	3	4	5	6	7	8	9	>=10	
20	26.0%	26.0%	26.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	0.0%
25	22.0	22.0	22.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	0.0
30	20.0	20.0	20.0	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	5.0
35	17.0	17.0	17.0	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	4.5
40	15.0	15.0	15.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	3.4
45	14.0	14.0	14.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	2.3
50	12.0	12.0	12.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	2.0
55	10.0	10.0	10.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	0.0
60	12.0	12.0	12.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	0.0
65	12.0	12.0	12.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	0.0

Separations from Active Service due to Termination Percentage of Female Members Separating within the Next Year												
Age	Years of Service											
	0	1	2	3	4	5	6	7	8	9	>=10	
20	30.0%	30.0%	30.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	0.0%
25	25.5	25.5	25.5	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	0.0
30	22.5	22.5	22.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	6.0
35	19.0	19.0	19.0	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	5.0
40	16.5	16.5	16.5	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	3.6
45	14.0	14.0	14.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	2.5
50	13.5	13.5	13.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	2.0
55	12.0	12.0	12.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	0.0
60	12.5	12.5	12.5	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	0.0
65	13.0	13.0	13.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	0.0



Schedule D – State Employees’ Actuarial Assumptions and Methods

**SALARY INCREASE RATES:** The following salary increase rates are used. Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown:

Pay Increase Assumptions for an Individual Member			
Years of Service	Annual Step Rate/ Promotional Rates	Inflation & Productivity (Economy)	Total Increase (Next Year)
1	1.85%	3.75%	5.60%
2	1.85	3.75	5.60
3	1.25	3.75	5.00
4	0.95	3.75	4.70
5	0.95	3.75	4.70
6	0.95	3.75	4.70
7	0.85	3.75	4.60
8	0.75	3.75	4.50
9	0.50	3.75	4.25
10	0.50	3.75	4.25
11-19	0.15	3.75	3.90
20 or more	0.00	3.75	3.75

**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 D – Teachers’ Actuarial Assumptions and Methods

**TEACHERS**  
**Plan Specific Assumptions and Methods**

**MORTALITY RATES:**

Pre-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Retirement:

1994 Group Annuity Mortality Tables for males and females with a three year setback in age for males and females.

Post-Disablement:

70% of PBGC Disabled Mortality Table 5a for Males.  
90% of PBGC Disabled Mortality Table 6a for Females.

Mortality Rates						
Age	Male			Female		
	Pre-retirement	Post-retirement	Post-disablement	Pre-retirement	Post-retirement	Post-disablement
20	0.0484%	0.0430%	3.3810%	0.0280%	0.0262%	2.3670%
25	0.0624	0.0556	3.3810	0.0291	0.0289	2.3670
30	0.0779	0.0727	2.5340	0.0331	0.0302	2.1330
35	0.0849	0.0839	1.9460	0.0449	0.0397	1.9260
40	0.0999	0.0891	1.9740	0.0652	0.0551	1.8810
45	0.1458	0.1252	2.2540	0.0923	0.0825	2.0160
50	0.2326	0.1899	2.6810	0.1310	0.1112	2.3130
55	0.3979	0.3213	3.3740	0.2084	0.1734	2.6550
60	0.7090	0.5581	4.2210	0.3863	0.2919	2.9790
65	1.2940	1.0147	4.7460	0.7621	0.5832	3.3300
70	2.1729	1.8034	5.1730	1.2709	1.0764	3.6990
75	3.4051	2.8481	5.8940	2.0381	1.6506	4.4280
80	5.5861	4.5171	7.8960	3.5362	2.8366	6.7140
85	8.9613	7.5532	11.7740	6.0979	4.9153	10.1520
90	13.9452	11.5671	17.6750	10.4594	8.4023	15.1380

5% of pre-retirement deaths are assumed to be service related.



*Schedule D – Teachers’ Actuarial Assumptions and Methods*

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

Separations from Active Service due to Retirement				
Percentage of Members Separating within the Next Year				
Age	Male		Female	
	Less than 30 Years of Service	More than 30 Years of Service	Less than 30 Years of Service	More than 30 Years of Service
<=49	0.00%	0.00%	0.00%	0.00%
50	2.00	17.50	2.00	15.00
51	2.00	17.50	2.40	15.00
52	2.00	17.50	2.70	15.00
53	2.30	17.50	2.40	15.00
54	4.00	17.50	3.70	15.00
55	5.70	22.50	6.10	22.50
56	4.60	22.50	5.40	22.50
57	4.50	22.50	5.70	22.50
58	6.60	22.50	6.20	22.50
59	7.00	22.50	7.50	22.50
60	7.50	22.50	8.50	22.50
61	11.00	30.00	12.00	30.00
62	17.00	35.00	17.00	40.00
63	14.00	35.00	16.00	35.00
64	18.00	30.00	16.50	25.00
65	40.00	40.00	40.00	40.00
66	40.00	35.00	40.00	35.00
67	40.00	20.00	40.00	30.00
68	40.00	20.00	40.00	25.00
69	40.00	20.00	40.00	20.00
>=70	100.00	100.00	100.00	100.00



***Schedule D – Teachers’ Actuarial Assumptions and Methods***

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

<b>Separations from Active Service due to Disability Percentage of Members Separating within the Next Year</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
20	0.0000%	0.0000%
25	0.0120	0.0070
30	0.0150	0.0170
35	0.0270	0.0500
40	0.0320	0.0600
45	0.1530	0.0700
50	0.2040	0.1500
55	0.3000	0.3400
60	0.4740	0.4000
65	0.4250	0.5500



**Schedule D – Teachers’ Actuarial Assumptions and Methods**

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

Separations from Active Service due to Termination												
Percentage of Male Members Separating within the Next Year												
Age	Years of Service											
	0	1	2	3	4	5	6	7	8	9	>=10	
20	20.0%	20.0%	20.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	0.8%
25	15.0	15.0	15.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	0.8
30	15.0	15.0	15.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	4.0
35	14.0	14.0	14.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	3.2
40	14.0	14.0	14.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	2.5
45	15.0	15.0	15.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	1.9
50	13.5	13.5	13.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	1.5
55	14.0	14.0	14.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	0.0
60	17.0	17.0	17.0	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	0.0
>=65	17.0	17.0	17.0	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	0.0

Separations from Active Service due to Termination												
Percentage of Female Members Separating within the Next Year												
Age	Years of Service											
	0	1	2	3	4	5	6	7	8	9	>=10	
20	17.0%	17.0%	17.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	0.0%
25	14.0	14.0	14.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	15.0
30	17.0	17.0	17.0	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	5.0
35	15.0	15.0	15.0	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	4.0
40	12.5	12.5	12.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	2.8
45	11.5	11.5	11.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	2.0
50	11.8	11.8	11.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	1.7
55	12.5	12.5	12.5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	0.0
60	13.0	13.0	13.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0.0
>=65	13.0	13.0	13.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0.0





Schedule D – Teachers’ Actuarial Assumptions and Methods

**SALARY INCREASE RATES:** The following salary increase rates are used. Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown:

Pay Increase Assumptions for an Individual Member			
Years of Service	Annual Step Rate/ Promotional Rates	Inflation & Productivity (Economy)	Total Increase (Next Year)
1	2.45%	3.75%	6.20%
2	2.35	3.75	6.10
3	2.35	3.75	6.10
4	1.95	3.75	5.70
5	1.95	3.75	5.70
6	1.95	3.75	5.70
7	1.85	3.75	5.60
8	1.85	3.75	5.60
9	1.85	3.75	5.60
10	1.35	3.75	5.10
11	1.35	3.75	5.10
12	1.35	3.75	5.10
13	1.25	3.75	5.00
14	1.25	3.75	5.00
15	1.15	3.75	4.90
16	1.15	3.75	4.90
17	1.05	3.75	4.80
18	0.95	3.75	4.70
19	0.95	3.75	4.70
20 or more	0	3.75	3.75



*Schedule D – State Police Actuarial Assumptions and Methods*

**STATE POLICE  
Plan Specific Assumptions and Methods**

**MORTALITY RATES:**

Pre-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Retirement:

1994 Group Annuity Mortality Tables for males and females with a four year setback in age for males and females.

Post-Disablement:

70% of PBGC Disabled Mortality Table 5a for Males.  
90% of PBGC Disabled Mortality Table 6a for Females.

Mortality Rates						
Age	Male			Female		
	Pre-retirement	Post-retirement	Post-disablement	Pre-retirement	Post-retirement	Post-disablement
20	0.0484%	0.0391%	3.3810%	0.0280%	0.0242%	2.3670%
25	0.0624	0.0530	3.3810	0.0291	0.0286	2.3670
30	0.0779	0.0696	2.5340	0.0331	0.0294	2.1330
35	0.0849	0.0821	1.9460	0.0449	0.0373	1.9260
40	0.0999	0.0862	1.9740	0.0652	0.0512	1.8810
45	0.1458	0.1156	2.2540	0.0923	0.0768	2.0160
50	0.2326	0.1722	2.6810	0.1310	0.1033	2.3130
55	0.3979	0.2872	3.3740	0.2084	0.1568	2.6550
60	0.7090	0.4949	4.2210	0.3863	0.2563	2.9790
65	1.2940	0.8986	4.7460	0.7621	0.5093	3.3300
70	2.1729	1.6239	5.1730	1.2709	0.9694	3.6990
75	3.4051	2.5951	5.8940	2.0381	1.4953	4.4280
80	5.5861	4.0858	7.8960	3.5362	2.5325	6.7140
85	8.9613	6.8615	11.7740	6.0979	4.3952	10.1520
90	13.9452	10.5792	17.6750	10.4594	7.5347	15.1380

60% of pre-retirement deaths are assumed to be service related.



Schedule D – State Police Actuarial Assumptions and Methods

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

Separations from Active Service due to Retirement Percentage of Members Separating within the Next Year Both Sexes		
Age	Less than 25 Years	More than 25 Years
	of Service	of Service
<=49	0.00%	0.00%
50	10.00	15.00
51	10.00	15.00
52	10.00	15.00
53	10.00	15.00
54	10.00	10.00
55	10.00	15.00
56	10.00	15.00
57	10.00	15.00
58	12.00	20.00
59	12.00	20.00
60	25.00	40.00
61	35.00	40.00
62	50.00	100.00
63	50.00	100.00
>=64	100.00	100.00



**Schedule D – State Police Actuarial Assumptions and Methods**

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

Separations from Active Service due to Disability Percentage of Members Separating within the Next Year	
Age	Unisex
<=29	0.0000%
30	0.0281
35	0.1341
40	0.2100
45	0.4106
50	0.6750
55	1.0013
>=60	0.0000



**Schedule D – State Police Actuarial Assumptions and Methods**

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

Separations from Active Service due to Termination Percentage of Male Members Separating within the Next Year											
Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	>=10
20	7.5%	7.5%	7.5%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	3.0%
25	7.5	7.5	7.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	3.0
30	7.5	7.5	7.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0
35	7.5	7.5	7.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	2.4
40	7.5	7.5	7.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	1.8
45	10.0	10.0	10.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	1.4
50	10.0	10.0	10.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	1.2
55	10.0	10.0	10.0	6.7	6.7	6.7	6.7	6.7	6.7	6.7	1.2
60	10.0	10.0	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	1.2
65	10.0	10.0	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	1.2

Separations from Active Service due to Termination Percentage of Female Members Separating within the Next Year											
Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	>=10
20	18.4%	12.5%	10.1%	10.8%	11.6%	12.2%	12.3%	9.6%	7.0%	5.3%	3.6%
25	18.3	13.3	10.8	10.5	10.4	10.5	10.2	8.3	6.6	5.4	4.4
30	18.1	14.4	11.9	10.2	9.1	8.4	7.8	6.9	6.2	5.7	5.5
35	17.0	14.4	12.1	10.0	8.5	7.4	6.7	6.3	6.2	6.0	6.1
40	15.2	13.5	11.7	9.8	8.4	7.4	6.7	6.5	6.4	6.2	6.2
45	12.7	11.7	10.8	9.8	9.0	8.2	7.7	7.5	6.8	6.4	5.9
50	9.4	9.1	9.3	10.0	10.1	10.0	9.8	9.2	7.5	6.6	5.2
55	5.2	5.7	7.4	10.2	11.9	12.6	12.9	11.8	8.4	6.7	4.1
60	1.0	1.3	4.9	10.6	14.2	16.2	17.1	15.1	9.6	6.8	2.6
65	0.0	0.0	1.5	11.1	17.1	20.5	22.2	19.1	11.0	6.9	0.6



Schedule D – 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 Assumptions for an Individual Member			
Years of Service	Annual Step Rate/ Promotional Rates	Inflation & Productivity (Economy)	Total Increase (Next Year)
1	1.25%	3.50%	4.75%
2	1.25	3.50	4.75
3	1.25	3.50	4.75
4	1.25	3.50	4.75
5	1.15	3.50	4.65
6-9	0.90	3.50	4.40
10-19	0.50	3.50	4.00
20 or more	0.00	3.50	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 D – Judicial Actuarial Assumptions and Methods

**JUDICIAL  
Plan Specific Assumptions and Methods**

**MORTALITY RATES:**

Pre-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Disablement:

70% of PBGC Disabled Mortality Table 5a for Males.  
90% of PBGC Disabled Mortality Table 6a for Females.

Mortality Rates				
Percentage of Members within the Next Year				
Age	Male		Female	
	Pre- and Post-retirement	Post-disablement	Pre- and Post-retirement	Post-disablement
20	0.0484%	3.3810%	0.0280%	2.3670%
25	0.0624	3.3810	0.0291	2.3670
30	0.0779	2.5340	0.0331	2.1330
35	0.0849	1.9460	0.0449	1.9260
40	0.0999	1.9740	0.0652	1.8810
45	0.1458	2.2540	0.0923	2.0160
50	0.2326	2.6810	0.1310	2.3130
55	0.3979	3.3740	0.2084	2.6550
60	0.7090	4.2210	0.3863	2.9790
65	1.2940	4.7460	0.7621	3.3300
70	2.1729	5.1730	1.2709	3.6990
75	3.4051	5.8940	2.0381	4.4280
80	5.5861	7.8960	3.5362	6.7140
85	8.9613	11.7740	6.0979	10.1520
90	13.9452	17.6750	10.4594	15.1380

5% of pre-retirement deaths are assumed to be service related.



**Schedule D – Judicial Actuarial Assumptions and Methods**

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

Separations from Active Service due to Retirement								
Percentage of Members Separating within the Next Year								
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	50	50	0	0	50	50
61	0	0	50	15	0	0	50	15
62	0	0	50	15	0	0	50	15
63	0	0	50	15	0	0	50	15
64	0	0	50	15	0	0	50	15
65	0	50	15	15	0	50	50	15
66	0	15	15	15	0	15	15	15
67	0	15	15	15	0	15	15	15
68	0	15	15	15	0	15	15	15
69	0	15	15	15	0	15	15	15
>=70	0	100	100	100	0	100	100	100

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

Separations from Active Service due to Disability		
Percentage of Members Separating within the Next Year		
Age	Male	Female
<=29	0.0000%	0.0000%
30	0.0070	0.0070
35	0.0370	0.0450
40	0.1420	0.0900
45	0.2920	0.2100
50	0.4800	0.3970
55	0.7120	0.6000
>=60	0.0000	0.0000





*Schedule D – Judicial Actuarial Assumptions and Methods*

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**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 D – Virginia Law Officers’ Actuarial Assumptions and Methods

VIRGINIA LAW OFFICERS
Plan Specific Assumptions and Methods

MORTALITY RATES:

Pre-Retirement:

1994 Group Annuity Mortality Tables for males and females with a one year setback in age for males and females.

Post-Retirement:

1994 Group Annuity Mortality Tables for males and females with a four year setback in age for males and females.

Post-Disablement:

70% of PBGC Disabled Mortality Table 5a for Males.
90% of PBGC Disabled Mortality Table 6a for Females.

Table with 7 columns: Age, Pre-retirement, Male Post-retirement, Post-disablement, Pre-retirement, Female Post-retirement, Post-disablement. Rows range from age 20 to 90.

60% of pre-retirement deaths are assumed to be service related.



Schedule D – Virginia Law Officers’ Actuarial Assumptions and Methods

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

Separations from Active Service due to Retirement Percentage of Members Separating within the Next Year Unisex		
Age	Less than 25 Years	More than 25 Years
	of Service	of Service
<=49	0.00%	0.00%
50	9.20	25.00
51	9.00	15.00
52	9.00	15.00
53	9.00	15.00
54	10.00	15.00
55	9.50	20.00
56	9.00	20.00
57	12.00	20.00
58	10.00	25.00
59	12.00	25.00
60	20.00	40.00
61	26.00	50.00
62	40.00	100.00
63	20.00	100.00
64	20.00	100.00
>=65	100.00	100.00



Schedule D – Virginia Law Officers’ Actuarial Assumptions and Methods

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

Separations from Active Service due to Disability Percentage of Members Separating within the Next Year	
Age	Unisex
<=27	0.0000%
28	0.0250
29	0.0250
30	0.0250
35	0.1140
40	0.1810
45	0.2690
50	0.4740
55	0.7820
60	0.6200
61	0.6200
62	0.6200
>=63	0.0000



**Schedule D – Virginia Law Officers’ Actuarial Assumptions and Methods**

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

Separations from Active Service due to Termination Percentage of Male Members Separating within the Next Year												
Age	Years of Service											
	0	1	2	3	4	5	6	7	8	9	>=10	
20	25.0%	25.0%	25.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	5.0%
25	20.0	20.0	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	5.0
30	20.0	20.0	20.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	5.0
35	20.0	20.0	20.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	5.0
40	15.0	15.0	15.0	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	4.0
45	15.0	15.0	15.0	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	4.0
50	15.0	15.0	15.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	4.0
55	12.0	12.0	12.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	4.0
60	12.5	12.5	12.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	4.0
65	15.0	15.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	4.0

Separations from Active Service due to Termination Percentage of Female Members Separating within the Next Year												
Age	Years of Service											
	0	1	2	3	4	5	6	7	8	9	>=10	
20	20.0%	20.0%	20.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	7.5%
25	20.0	20.0	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	7.5
30	20.0	20.0	20.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	7.5
35	20.0	20.0	20.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	7.5
40	17.5	17.5	17.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	6.2
45	17.5	17.5	17.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	5.9
50	17.5	17.5	17.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	6.0
55	10.0	10.0	10.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	6.0
60	10.0	10.0	10.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	6.0
65	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	6.0



Schedule D – 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 Assumptions for an Individual Member			
Years of Service	Annual Step Rate/ Promotional Rates	Inflation & Productivity (Economy)	Total Increase (Next Year)
1	1.25%	3.50%	4.75%
2	1.25	3.50	4.75
3	1.25	3.50	4.75
4	1.25	3.50	4.75
5	1.15	3.50	4.65
6-9	0.90	3.50	4.40
10-19	0.50	3.50	4.00
20 or more	0.00	3.50	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 D – 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.



## *Schedule E – Actuarial Cost Method*

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### **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 F – Summary of Plan Provisions

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**Benefit Provisions which apply to all VRS Plans**

<b>Plan Year:</b>	Twelve-month period ending June 30th.
<b>Administration:</b>	All plans are administered by the Board of Trustees of the Virginia Retirement System.
<b>Employee Contributions:</b>	All active members contribute 5.00% 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).
<b>Creditable Compensation:</b>	Annual salary minus any overtime pay, payments of a temporary nature, or payments for extra duties.
<b>Average Final Compensation (AFC):</b>	The average of the member's highest 36 consecutive months of salary.
<b>Optional Forms of Payment:</b>	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:  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.



***Schedule F – Summary of Plan Provisions***

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**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.

**Cost-of-living Increase:**

Members qualify for cost-of-living increased 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%.



Schedule F – State Employees' Plan Provisions

**STATE EMPLOYEES**  
**Plan Specific Benefit Provisions**

<b>Effective Date:</b>	March 1, 1952
<b>Type of Plan:</b>	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.
<b>Eligibility:</b>	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.
<b>Service:</b>	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.
<b>Normal Retirement</b>	<p>Eligibility:</p> <p>A member may retire upon Normal Retirement on or after age 65 with credit for 5 years of service.</p> <p>Annual Benefit:</p> <p>1.7% of average final compensation (AFC) times years of service.</p> <p>Payment Form:</p> <p>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.</p>



## Schedule F – State Employees' Plan Provisions

### **Early Retirement**

#### 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.

### **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).



## Schedule F – State Employees' Plan Provisions

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### 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 F – 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 age 65 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 65. If the member dies while disabled before age 65, 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 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:

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.



## Schedule F – State Employees' Plan Provisions

### **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 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 F – Teachers' Plan Provisions

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**TEACHERS**  
**Plan Specific Benefit Provisions**

<b>Effective Date:</b>	March 1, 1952
<b>Type of Plan:</b>	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.
<b>Eligibility:</b>	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 teachers.
<b>Service:</b>	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.
<b>Normal Retirement</b>	<p><b>Eligibility:</b></p> <p>A member may retire upon Normal Retirement on or after age 65 with credit for 5 years of service.</p> <p><b>Annual Benefit:</b></p> <p>1.7% of average final compensation (AFC) times years of service.</p> <p><b>Payment Form:</b></p> <p>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.</p>





## Schedule F – Teachers’ Plan Provisions

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### **Early Retirement**

#### 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.



## Schedule F – Teachers’ Plan Provisions

### **Disability Retirement**

#### Eligibility:

A member 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.

#### 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 F – Teachers' Plan Provisions

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**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 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:

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.



## Schedule F – Teachers' Plan Provisions

### **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 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.



Schedule F – State Police Plan Provisions

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**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.

**Eligibility:** All state police officers of the Commonwealth of Virginia.

**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.

**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 F – State Police Plan Provisions

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### 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 \$12,456 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 \$12,456 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 F – State Police Plan Provisions

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### **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 F – State Police Plan Provisions

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### 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.





**Schedule F – State Police Plan Provisions**

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**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.

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 F – State Police Plan Provisions

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### **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 F – Judicial Plan Provisions

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**JUDICIAL**  
**Plan Specific Benefit Provisions**

<b>Effective Date:</b>	July 1, 1970
<b>Type of Plan:</b>	JRS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered a single-employer PERS.
<b>Eligibility:</b>	All judges of the Commonwealth of Virginia.
<b>Service:</b>	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.
<b>Normal Retirement</b>	<p>Eligibility:</p> <p>A member may retire upon Normal Retirement on or after age 65 with credit for 5 years of service.</p> <p>Annual Benefit:</p> <p>1.7% of average final compensation (AFC) times years of service, not to exceed 78% of AFC.</p> <p>Payment Form:</p> <p>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.</p>



***Schedule F – Judicial Plan Provisions***

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**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.



## Schedule F – Judicial Plan Provisions

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### **Disability Retirement**

#### 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. 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 F – Judicial Plan Provisions

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### **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%.



## *Schedule F – Judicial Plan Provisions*

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### **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 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.



Schedule F – Virginia Law Officers' Plan Provisions

**VIRGINIA LAW OFFICERS  
Plan Specific Benefit Provisions**

<b>Effective Date:</b>	October 1, 1999
<b>Type of Plan:</b>	VaLORS is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is considered a single-employer PERS.
<b>Eligibility:</b>	All full-time, salaried, permanent employees of the Capitol Police Force, campus police officers, game wardens, special agents of the Department of Alcoholic Beverage Control, law enforcement officers employed by the Virginia Marine Resources Commission, correctional officers, and commercial vehicle enforcement officers employed by the Department of State Police.
<b>Service:</b>	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.
<b>Normal Retirement</b>	<p>Eligibility:</p> <p>A member may retire upon Normal Retirement on or after age 60 with credit for 5 years of service.</p> <p>Annual Benefit:</p> <p>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.</p> <p>Employees hired before July 1, 2001, must make a one-time election to receive benefits under (i) or (ii) below:</p> <ul style="list-style-type: none"><li>(i) 1.7% of average final compensation (AFC) times years of service plus the temporary supplement described in 5(d).</li><li>(ii) 2.0% of average final compensation (AFC) times years of service and no temporary supplement.</li></ul>





## Schedule F – 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 \$12,456 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 F – 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 \$12,456 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 F – Virginia Law Officers' Plan Provisions

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### 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.



Schedule F – Virginia Law Officers’ Plan Provisions

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**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.

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 F – Virginia Law Officers’ Plan Provisions

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### **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).

#### 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 F – Summary of Plan Changes

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### 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 F – Summary of Plan Changes

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### **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.



*Schedule F – Summary of Plan Changes*

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**2005 Valuation**

No material changes were made to the plan provisions.

**2006 Valuation**

No material changes were made to the plan provisions.

**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.





*Schedule G – Schedule of Active Member Data*

**STATE EMPLOYEES  
AS OF JUNE 30, 2010**

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	28	0	0	0	0	0	0	28	\$ 587,222
20 to 24	1,688	32	0	0	0	0	0	1,720	\$ 47,407,761
25 to 29	4,188	792	16	0	0	0	0	4,996	\$ 171,649,651
30 to 34	3,656	1,800	512	12	0	0	0	5,980	\$ 238,638,010
35 to 39	3,140	2,119	1,277	347	23	0	0	6,906	\$ 299,996,990
40 to 44	3,017	2,169	1,590	1,051	732	41	0	8,600	\$ 380,998,464
45 to 49	2,910	2,218	1,910	1,372	1,899	881	117	11,307	\$ 514,141,861
50 to 54	2,575	2,097	1,766	1,374	1,929	1,653	1,644	13,038	\$ 621,332,368
55 to 59	1,859	1,771	1,688	1,359	1,641	1,427	2,731	12,476	\$ 629,775,669
60	244	303	281	237	273	227	516	2,081	\$ 109,216,506
61	210	260	232	207	255	223	471	1,858	\$ 100,001,637
62	195	215	245	186	240	184	438	1,703	\$ 92,941,598
63	159	191	218	186	211	161	418	1,544	\$ 83,663,546
64	85	114	142	102	137	112	244	936	\$ 54,045,340
65	68	93	92	77	105	81	228	744	\$ 42,223,514
66	40	74	67	72	62	52	182	549	\$ 33,739,364
67	33	38	45	50	49	41	155	411	\$ 25,153,183
68	20	37	33	29	21	41	82	263	\$ 15,280,337
69	15	23	38	30	31	24	75	236	\$ 13,632,328
70 & Over	33	65	93	71	101	72	222	657	\$ 39,970,925
<b>Total</b>	<b>24,163</b>	<b>14,411</b>	<b>10,245</b>	<b>6,762</b>	<b>7,709</b>	<b>5,220</b>	<b>7,523</b>	<b>76,033</b>	<b>\$ 3,514,396,272</b>

Average Age: 47.89

Average Service: 12.91



*Schedule G – Schedule of Active Member Data*

**TEACHERS  
AS OF JUNE 30, 2010**

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	10	0	0	0	0	0	0	10	\$ 214,536
20 to 24	3,305	12	0	0	0	0	0	3,317	\$ 118,497,397
25 to 29	11,507	4,545	13	0	0	0	0	16,065	\$ 655,043,936
30 to 34	5,765	8,685	2,229	7	0	0	0	16,686	\$ 739,979,194
35 to 39	4,780	5,375	5,699	1,462	9	0	0	17,325	\$ 802,627,331
40 to 44	4,796	5,053	3,851	3,728	1,172	12	0	18,612	\$ 869,608,456
45 to 49	4,474	5,266	3,669	2,366	2,894	1,187	24	19,880	\$ 918,659,073
50 to 54	3,162	4,580	4,017	2,631	2,335	2,966	1,931	21,622	\$ 1,083,606,367
55 to 59	1,866	3,137	3,388	2,843	2,536	2,081	4,331	20,182	\$ 1,106,355,404
60	258	428	476	473	483	406	664	3,188	\$ 180,585,728
61	198	402	432	427	443	374	559	2,835	\$ 161,181,013
62	175	295	364	360	427	294	474	2,389	\$ 134,934,026
63	157	291	315	300	361	276	413	2,113	\$ 120,098,414
64	64	160	173	202	203	149	236	1,187	\$ 67,643,110
65	62	122	154	127	149	113	192	919	\$ 52,251,373
66	35	103	94	73	87	81	138	611	\$ 34,418,216
67	27	63	64	47	80	53	116	450	\$ 24,241,690
68	26	42	48	30	50	33	73	302	\$ 15,301,467
69	20	26	31	31	23	24	44	199	\$ 9,748,207
70 & Over	55	76	84	64	60	54	177	570	\$ 24,894,254
<b>Total</b>	<b>40,742</b>	<b>38,661</b>	<b>25,101</b>	<b>15,171</b>	<b>11,312</b>	<b>8,103</b>	<b>9,372</b>	<b>148,462</b>	<b>\$ 7,119,889,193</b>

Average Age: 45.02

Average Service: 11.65



Schedule G – Schedule of Active Member Data

STATE POLICE  
AS OF JUNE 30, 2010

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	20	0	0	0	0	0	0	20	\$ 830,710
25 to 29	166	99	1	0	0	0	0	266	\$ 11,596,354
30 to 34	57	149	58	1	0	0	0	265	\$ 11,886,056
35 to 39	24	92	152	22	0	0	0	290	\$ 14,309,057
40 to 44	25	40	70	75	90	0	0	300	\$ 16,605,173
45 to 49	17	14	26	37	157	45	1	297	\$ 18,140,439
50 to 54	1	7	18	9	39	73	41	188	\$ 13,079,588
55 to 59	2	4	2	1	3	12	62	86	\$ 6,713,012
60	0	0	1	0	1	4	9	15	\$ 1,197,953
61	0	0	0	1	0	1	7	9	\$ 659,677
62	0	0	0	1	0	0	5	6	\$ 517,683
63	0	1	0	1	0	0	7	9	\$ 709,247
64	0	0	0	0	1	0	6	7	\$ 602,603
65	1	0	0	0	0	0	4	5	\$ 421,414
66	0	0	0	0	0	0	1	1	\$ 79,188
67	0	0	0	0	1	0	0	1	\$ 54,624
68	0	0	0	0	0	0	1	1	\$ 86,378
69	0	0	0	0	0	0	1	1	\$ 111,400
70 & Over	0	0	0	0	0	0	0	0	\$ -
Total	313	406	328	148	292	135	145	1,767	\$ 97,600,556

Average Age: 41.10

Average Service: 14.68



**Schedule G – Schedule of Active Member Data**

**JUDICIAL  
AS OF JUNE 30, 2010**

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	4	0	0	0	0	0	0	4	\$ 569,316
40 to 44	18	7	0	0	0	0	0	25	\$ 3,604,079
45 to 49	13	10	5	2	0	0	0	30	\$ 4,446,137
50 to 54	23	25	12	13	1	0	0	74	\$ 11,065,718
55 to 59	18	30	24	27	8	1	0	108	\$ 16,171,534
60	3	2	2	6	2	2	0	17	\$ 2,592,114
61	2	4	4	8	2	0	0	20	\$ 3,030,335
62	3	5	6	11	5	0	0	30	\$ 4,429,735
63	4	4	8	7	3	1	0	27	\$ 4,045,557
64	0	0	1	2	5	0	0	8	\$ 1,233,462
65	1	7	5	4	1	3	0	21	\$ 3,141,612
66	0	4	2	2	3	2	1	14	\$ 2,145,039
67	0	0	4	1	1	1	0	7	\$ 1,038,101
68	1	2	3	3	1	3	0	13	\$ 1,932,620
69	0	0	2	1	1	4	0	8	\$ 1,249,267
70 & Over	0	0	1	0	0	0	1	2	\$ 326,168
Total	90	100	79	87	33	17	2	408	\$ 61,020,794

Average Age: 57.70

Average Service: 11.30



*Schedule G – Schedule of Active Member Data*

**VIRGINIA LAW OFFICERS  
AS OF JUNE 30, 2010**

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	6	0	0	0	0	0	0	6	\$ 178,281
20 to 24	584	9	0	0	0	0	0	593	\$ 18,006,959
25 to 29	1,012	191	4	0	0	0	0	1,207	\$ 38,471,158
30 to 34	621	332	200	4	0	0	0	1,157	\$ 38,153,243
35 to 39	552	351	372	138	3	0	0	1,416	\$ 48,877,769
40 to 44	456	316	346	250	128	0	0	1,496	\$ 53,609,326
45 to 49	375	266	323	224	277	116	2	1,583	\$ 59,355,720
50 to 54	258	202	246	145	135	98	34	1,118	\$ 43,365,332
55 to 59	134	142	186	123	92	49	48	774	\$ 30,472,223
60	18	17	20	12	16	8	4	95	\$ 3,704,315
61	10	17	17	14	5	8	9	80	\$ 3,272,285
62	14	12	16	10	9	4	7	72	\$ 2,905,759
63	5	12	13	10	4	2	2	48	\$ 1,892,397
64	4	0	7	4	1	0	0	16	\$ 568,970
65	1	2	6	5	5	0	3	22	\$ 980,193
66	2	0	2	2	3	1	0	10	\$ 406,997
67	2	1	3	2	0	1	4	13	\$ 596,322
68	4	1	3	1	3	0	1	13	\$ 539,689
69	0	1	1	0	1	1	3	7	\$ 389,612
70 & Over	1	2	1	1	3	0	0	8	\$ 293,705
<b>Total</b>	<b>4,059</b>	<b>1,874</b>	<b>1,766</b>	<b>945</b>	<b>685</b>	<b>288</b>	<b>117</b>	<b>9,734</b>	<b>\$ 346,040,255</b>

Average Age: 41.49

Average Service: 9.07



*Schedule H – Schedule of Retiree and Beneficiary Data*

**RETIREE AND BENEFICIARY DATA  
AS OF JUNE 30, 2010**

Employer	Prior Year Total Retirees and Beneficiaries	Retirees and Beneficiaries		Current Year Total Retirees and Beneficiaries	Current Annual Allowances (000s)	Prior Annual Allowances (000s)	Annualized % Increase in Annual Allowances	Average Annual Allowances	Prior Year Average Annual Allowances	% Increase in Average Annual Allowances
		Added	Removed							
State	43,768	3,728	1,432	46,064	\$ 861,362	\$ 795,341	8.3%	\$ 18,699	\$ 18,172	2.9%
Teacher	61,145	4,045	1,432	63,758	1,393,163	1,326,850	5.0%	21,851	21,700	0.7%
Political	33,587	3,007	1,147	35,447	528,610	492,283	7.4%	14,913	14,657	1.8%
Total VRS	138,500	10,780	4,011	145,269	\$2,783,135	\$2,614,474	6.5%	\$ 19,158	\$ 18,877	1.5%
State Police	1,082	62	22	1,122	41,226	39,861	3.4%	36,743	36,840	-0.3%
VaLORS	2,061	281	24	2,318	51,498	45,763	12.5%	22,216	22,204	0.1%
Judicial	439	29	17	451	30,356	29,262	3.7%	67,308	66,656	1.0%
Totals	142,082	11,152	4,074	149,160	\$2,906,215	\$2,729,360	6.5%	\$ 19,484	\$ 19,210	1.4%

**CHANGE IN ALLOWANCES FOR RETIREES AND BENEFICIARIES  
AS OF JUNE 30, 2010**

	Prior Year Annual Allowances	COLA	Additions	Deletions	Current Year Annual Allowances
State	\$ 795,341	\$ -	\$ 88,557	\$ 22,536	\$ 861,362
Teacher	1,326,850	-	95,290	28,977	1,393,163
Political	492,283	-	50,569	14,242	528,610
Total VRS	\$ 2,614,474	\$ -	\$ 234,416	\$ 65,755	\$ 2,783,135
State Police	39,861	-	2,450	1,085	41,226
VaLORS	45,763	-	6,667	932	51,498
Judges	29,262	-	2,116	1,022	30,356
Totals	\$ 2,729,360	\$ -	\$ 245,649	\$ 68,794	\$ 2,906,215