



# Cavanaugh Macdonald

## CONSULTING, LLC

*The experience and dedication you deserve*

December 18, 2015

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

Dear Ms. Wilkinson:

Enclosed are 13 original bound copies of the "Report on the Actuarial Valuation of Other Postemployment Benefits of the Virginia Retirement System Prepared as of June 30, 2015".

Sincerely yours,

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

Eric H. Gary, FSA, FCA, MAAA  
Chief Health Actuary

JIF/EHG:aap

Enclosure

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**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



**Virginia  
Retirement  
System**

**Report on the Actuarial Valuation  
of Other Postemployment Benefits  
of the Virginia Retirement System**

**Prepared as of June 30, 2015**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

December 18, 2015

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 other postemployment benefits plans (OPEB Plans) of the Virginia Retirement System (VRS), prepared as of June 30, 2015:

- Group Life Insurance Program (GLI)
- Health Insurance Credit Program (HIC)
  - State Employees (HIC – State Employees)
  - Teachers (HIC – Teachers)
  - Participating Political Subdivisions in Aggregate (HIC – Political Subdivisions)
  - Special Coverage Groups (HIC – Special Coverage Groups)
    - Constitutional Officers (HIC – Constitutional Officers)
    - Social Service Employees (HIC – State Employees)
    - Registrars (HIC – Registrars)
- Virginia Sickness and Disability Program (VSDP)
- Virginia Local Disability Program (VLDP)
  - Teachers (VLDP – Teachers)
  - Political Subdivisions (VLDP – Political Subdivisions)

As described above, this report includes information, in aggregate, on the actuarial valuations of the Health Insurance Credit Program for participating Political Subdivisions as of June 30, 2015. We have prepared and provided separately, actuarial valuation reports for each of the participating Political Subdivisions. Please refer to the individual reports for the valuation results, summary of actuarial assumptions and methods, and plan provisions for each of the participating Political Subdivision plans.

Governmental Accounting Standards Board Statements No. 43 and No. 45 (GASB 43 and 45) require actuarial valuations of retiree health care and other postemployment benefits (OPEB). Cavanaugh Macdonald Consulting, LLC (CMC) is submitting the results of the annual actuarial valuation of the OPEB Plans of VRS prepared as of June 30, 2015. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

Contribution rates for VRS employers are established every two years. The actuarially calculated employer contribution rates based on the June 30, 2015 results presented in this report are for fiscal years ending 2017 and 2018. The actuarially calculated employer contribution rates based on the June 30, 2014 valuation presented in this report are for informational purposes only.

The valuation results indicate that the full employer contribution rates shown in the following table are sufficient to fund the normal cost for all members and finance the unfunded accrued liability of the indicated OPEB Plans. For comparison, in the following table, we present the employer contribution rates based on the June 30, 2014 actuarial valuation, the employer contribution rates approved by the General Assembly for fiscal

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

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

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

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The Board of Trustees  
December 18, 2015  
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years ending 2015 and 2016, and the employer contribution rates based on the June 30, 2015 actuarial valuation.

OPEB Plan	Fiscal Years 2015 & 2016		2014 Valuation	Fiscal Years 2017 & 2018
	Board Approved	General Assembly Approved		2015 Valuation
	2013 Valuation			
GLI*	1.32%	1.19%	1.31%	1.31%
HIC – State Employees	1.17%	1.05%	1.17%	1.18%
HIC – Teachers	1.18%	1.06%	1.20%	1.23%
HIC – Participating Political Subdivisions**	0.27%	0.27%	0.31%	0.31%
HIC – Constitutional Officers	0.36%	n/a	0.34%	0.36%
HIC – Social Service Employees	0.44%	n/a	0.40%	0.42%
HIC – Registrars	0.40%	n/a	0.39%	0.41%
VSDP	0.73%	0.66%	0.77%	0.66%
VLDP – Teachers	0.29%	0.29%	0.30%	0.31%
VLDP – Political Subdivisions	0.60%	0.60%	0.59%	0.60%

\*The contribution rate for GLI includes an adjustment of 0.34% for active group life insurance, see Section I for additional detail.

\*\* Arithmetic average of individual employer rates.

The promised postemployment benefits of the OPEB Plans are included in the actuarially calculated contribution rates which are developed using the assumed actuarial cost method with projected benefits. The valuation takes into account the differentiation between Plan 1 vested members, Plan 1 non-vested members as of January 1, 2013 resulting from HB 1130 and SB 498, Plan 2 members and Hybrid members. Five-year smoothed market value of assets is used for actuarial valuation purposes (with the exception of HIC - Political Subdivisions and HIC - Special Coverage Groups). GASB 43 and 45 require the discount rate used to value a plan be based on the likely return of the assets used to pay benefits. As of June 30, 2015, the plan has assets in trust solely to provide benefits to eligible recipients. Therefore, the discount rate has been set at 7.00%. In accordance with the funding policy adopted by the Board of Trustees, the unfunded liability is being amortized by regular annual contributions as a level percentage of payroll within a closed 30 year period for the unfunded liability as of July 1, 2013, and gains and losses in subsequent years are amortized within a closed 20 year period, on the assumption that payroll will increase by 3% annually and the amortization period will decrease by one each year until reaching 0 years. In the event that the funding policy produces an effective amortization period of greater than 30 years, a 30 year amortization period is used in accordance with GASB 43 and 45. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the OPEB Plans and to reasonable expectations of anticipated experience under the OPEB Plans and meet the parameters for the disclosures under GASB 43 and 45.

The annual required contribution was determined in accordance with the accounting requirements under GASB 43 and 45.

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



The Board of Trustees  
December 18, 2015  
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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 OPEB Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of VRS.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: Experience of the OPEB Plans differing from that anticipated by the 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 OPEB Plans' funded status); and changes in the provisions of the OPEB Plans 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 Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Jose I. Fernandez', with a stylized, flowing script.

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

A handwritten signature in blue ink, appearing to read 'Eric H. Gary', with a stylized, flowing script.

Eric H. Gary, FSA, FCA, MAAA  
Chief Health Actuary

JIF/EHG:aap



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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 are summarized for each OPEB Plan on the following pages:

### GROUP LIFE INSURANCE PROGRAM (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active	360,873	360,855
Number Retired or Disabled	<u>166,148</u>	<u>159,238</u>
Total	527,021	520,093
Annual Covered Payroll	\$17,813,570	\$17,559,285
Assets:		
Market Value	\$ 1,162,617	\$ 1,079,315
Actuarial Value	\$ 1,128,876	\$ 992,221
Unfunded Actuarial Liability	\$ 1,700,228	\$ 1,709,788
Effective Amortization Period (Years)	28.6	29.4
Insurance Amount		
Active Members	\$35,627,140	\$35,118,570
Retired and Disabled Members	<u>7,803,680</u>	<u>7,369,106</u>
Total	\$43,430,820	\$42,487,676
Annual Required Contribution (ARC) in Dollars:		
Normal Cost	\$ 73,865*	\$ 72,649
Accrued Liability	<u>95,846</u>	<u>94,904</u>
Total	\$ 169,711	\$ 167,553
ARC as a Percent of Active Payroll**:		
Normal Cost	0.42%	0.42%
Accrued Liability	<u>0.55</u>	<u>0.55</u>
Total	0.97%	0.97%
Adjustment for Active Group Life Insurance	<u>0.34%</u>	<u>0.34%</u>
Total Cost for Plan	1.31%	1.31%
Contribution as ¢ per \$1,000 of Active Insurance Amount		
Active Members	14.1¢	14.1¢
Retired and Disabled Members	<u>40.4</u>	<u>40.6</u>
Total	54.5¢	54.7¢
Discount Rate	7.00%	7.00%

\*Includes total administrative expenses of \$183,000.

\*\*Includes timing adjustment factor of 1.0192.



## Section I – Summary of Principal Results (continued)

### HEALTH INSURANCE CREDIT PROGRAM STATE EMPLOYEES\* (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active	107,200	106,815
Number Retired, Disabled, or Eligible Deferred Vested	<u>45,003</u>	<u>43,943</u>
Total	152,203	150,758
Annual Covered Payroll	\$ 6,055,429	\$ 5,930,862
Assets:		
Market Value	\$ 67,433	\$ 65,201
Actuarial Value	\$ 67,164	\$ 60,645
Unfunded Actuarial Liability	\$ 909,362	\$ 901,497
Effective Amortization Period (Years)	28.0	29.0
Annual Required Contribution (ARC) in Dollars:		
Normal Cost	\$ 18,202**	\$ 18,029
Accrued Liability	<u>51,839</u>	<u>50,417</u>
Total	\$ 70,041	\$ 68,446
Annual Required Contribution as a Percent of Active Payroll***:		
Normal Cost	0.31%	0.30%
Accrued Liability	<u>0.87</u>	<u>0.87</u>
Total	1.18%	1.17%
Discount Rate	7.00%	7.00%

\* State Employees include State, JRS, SPORS, VaLORS, ORP, and UVA employees.

\*\* Includes total administrative expenses of \$195,080.

\*\*\* Includes timing adjustment factor of 1.0192.





## Section I – Summary of Principal Results (continued)

### HEALTH INSURANCE CREDIT PROGRAM TEACHERS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active	147,645	146,977
Number Retired, Disabled, or Eligible Deferred Vested	<u>61,956</u>	<u>59,821</u>
Total	209,601	206,798
Annual Covered Payroll	\$ 7,488,507	\$ 7,362,793
Assets:		
Market Value	\$ 84,384	\$ 82,108
Actuarial Value	\$ 85,379	\$ 79,177
Unfunded Actuarial Liability	\$ 1,240,036	\$ 1,218,544
Effective Amortization Period (Years)	27.8	29.0
Annual Required Contribution (ARC) in Dollars:		
Normal Cost	\$ 18,948*	\$ 18,631
Accrued Liability	<u>71,021</u>	<u>68,320</u>
Total	\$ 89,969	\$ 86,951
Annual Required Contribution as a Percent of Active Payroll**:		
Normal Cost	0.26%	0.25%
Accrued Liability	<u>0.97</u>	<u>0.95</u>
Total	1.23%	1.20%
Discount Rate	7.00%	7.00%

\* Includes total administrative expenses of \$210,627.

\*\* Includes timing adjustment factor of 1.0192.



## Section I – Summary of Principal Results (continued)

### HEALTH INSURANCE CREDIT PROGRAM PARTICIPATING POLITICAL SUBDIVISIONS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active	21,339	20,921
Number Retired, Disabled, or Eligible Deferred Vested	<u>4,667</u>	<u>4,278</u>
Total	26,006	25,199
Annual Covered Payroll	\$ 900,390	\$ 875,485
Assets:		
Market Value	\$ 19,348	\$ 18,605
Unfunded Actuarial Liability	\$ 17,564	\$ 16,592
Effective Amortization Period (Years)	27.8	29.2
Annual Required Contribution (ARC) in Dollars:		
Normal Cost*	\$ 947*	\$ 869
Accrued Liability	<u>1,005</u>	<u>924</u>
Total	\$ 1,952	\$ 1,793
Average Annual Required Contribution as a Percent of Active Payroll**:		
Normal Cost	0.14%	0.13%
Accrued Liability	<u>0.17</u>	<u>0.16</u>
Total	0.31%	0.29%
Discount Rate	7.00%	7.00%

\* Includes total administrative expenses of \$58,583.

\*\* Includes timing adjustment factor of 1.0192. These figures are the arithmetic average of all participating Political Subdivisions.



**Section I – Summary of Principal Results (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
CONSTITUTIONAL OFFICERS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
Number Active	12,060	11,796
Number Retired, Disabled, or Eligible Deferred Vested	<u>2,990</u>	<u>2,844</u>
Total	15,050	14,640
Annual Covered Payroll	\$ 584,797	\$ 567,134
Assets:		
Market Value	\$ 1,120	\$ 2,378
Unfunded Actuarial Liability	\$ 25,580	\$ 23,492
Effective Amortization Period (Years)	27.6	29.4
Annual Required Contribution (ARC) in Dollars:		
Normal Cost	\$ 600	\$ 586
Accrued Liability	<u>1,471</u>	<u>1,303</u>
Total	\$ 20,071	\$ 1,889
Annual Required Contribution as a Percent of Active Payroll*:		
Normal Cost	0.10%	0.11%
Accrued Liability	<u>0.26</u>	<u>0.23</u>
Total	0.36%	0.34%
Discount Rate	7.00%	7.00%

\* Includes timing adjustment factor of 1.0192.



## Section I – Summary of Principal Results (continued)

### HEALTH INSURANCE CREDIT PROGRAM SOCIAL SERVICE EMPLOYEES (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active	5,262	4,895
Number Retired, Disabled, or Eligible Deferred Vested	<u>1,786</u>	<u>1,647</u>
Total	7,048	6,542
Annual Covered Payroll	\$ 228,472	\$ 210,499
Assets:		
Market Value	\$ 915	\$ 1,736
Unfunded Actuarial Liability	\$ 12,492	\$ 11,211
Effective Amortization Period (Years)	27.8	30.0
Annual Required Contribution (ARC) in Dollars:		
Normal Cost	\$ 235	\$ 220
Accrued Liability	<u>714</u>	<u>615</u>
Total	\$ 949	\$ 835
Annual Required Contribution as a Percent of Active Payroll*:		
Normal Cost	0.10%	0.11%
Accrued Liability	<u>0.32</u>	<u>0.29</u>
Total	0.42%	0.40%
Discount Rate	7.00%	7.00%

\* Includes timing adjustment factor of 1.0192.



## Section I – Summary of Principal Results (continued)

### HEALTH INSURANCE CREDIT PROGRAM REGISTRARS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active	213	203
Number Retired, Disabled, or Eligible Deferred Vested	<u>59</u>	<u>57</u>
Total	272	260
Annual Covered Payroll	\$ 9,884	\$ 9,242
Assets:		
Market Value	\$ 7	\$ 31
Unfunded Actuarial Liability	\$ 497	\$ 451
Effective Amortization Period (Years)	27.1	29.0
Annual Required Contribution (ARC) in Dollars:		
Normal Cost	\$ 11	\$ 10
Accrued Liability	<u>29</u>	<u>25</u>
Total	\$ 40	\$ 35
Annual Required Contribution as a Percent of Active Payroll*:		
Normal Cost	0.11%	0.11%
Accrued Liability	<u>0.30</u>	<u>0.28</u>
Total	0.41%	0.39%
Discount Rate	7.00%	7.00%

\* Includes timing adjustment factor of 1.0192.



## Section I – Summary of Principal Results (continued)

### VIRGINIA SICKNESS AND DISABILITY PROGRAM LONG-TERM DISABILITY AND LONG-TERM CARE COMBINED (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active (participating in VSDP)	74,367	74,399
Number Disabled	2,842	2,701
Number Ported	<u>1,414</u>	<u>1,208</u>
Total	78,623	78,308
Annual Covered Payroll*	\$ 3,627,297	\$ 3,585,486
Assets:		
Market Value	\$ 414,518	\$ 410,098
Actuarial Value	\$ 398,609	\$ 376,371
Unfunded Actuarial Accrued Liability	\$ (163,362)	\$ (137,214)
Effective Amortization Period (Years)	25.9	28.4
Annual Required Contribution (ARC) in Dollars:		
Normal Cost**	\$ 33,306	\$ 34,913
Accrued Liability	<u>(9,730)</u>	<u>(7,756)</u>
Total	\$ 23,576	\$ 27,157
ARC as a Percent of Active Payroll***:		
Normal Cost	0.93%	0.99%
Accrued Liability	<u>(0.27)</u>	<u>(0.22)</u>
Total	0.66%	0.77%
Discount Rate	7.00%	7.00%

\* Annual Covered Payroll consists of only those State, VaLORS, and SPORS participating in VSDP.

\*\* Includes LTD third party administrator expenses of \$7,830,427 for 2014 and administrative expenses of \$8,535,828 for 2015.

\*\*\* Includes timing adjustment factor of 1.0192



## Section I – Summary of Principal Results (continued)

### VIRGINIA SICKNESS AND DISABILITY PROGRAM LONG-TERM DISABILITY (\$ IN THOUSANDS)

Valuation Date – June 30, 2015	State	SPORS	VaLORS	Total
Number Active (participating in VSDP)	65,130	1,412	7,825	74,367
Number Disabled	<u>2,235</u>	<u>14</u>	<u>593</u>	<u>2,842</u>
Total	67,365	1,426	8,418	77,209
Annual Covered Payroll*	\$3,272,314	\$ 69,528	\$ 285,455	\$3,627,297
LTD Assets: (Allocated by liabilities)				
Market Value	\$ 287,464	\$ 4,787	\$ 61,122	\$ 353,373
Actuarial Value	\$ 275,379	\$ 4,592	\$ 58,628	\$ 338,959
LTD Unfunded Actuarial Accrued Liability	\$ (112,295)	\$ (1,870)	\$ (23,876)	\$ (138,041)
Effective Amortization Period (Years)	27.7	24.9	27.1	27.5
LTD Annual Required Contribution (ARC) in Dollars:				
Normal Cost**	\$ 25,829	\$ 340	\$ 4,496	\$ 30,665
Accrued Liability	<u>(6,442)</u>	<u>(114)</u>	<u>(1,385)</u>	<u>(7,941)</u>
Total	\$ 19,387	\$ 226	\$ 3,111	\$ 22,724
LTD Annual Required Contribution as a Percent of Active Payroll***:				
Normal Cost	0.80%	0.50%	1.61%	0.86%
Accrued Liability	<u>(0.20)</u>	<u>(0.17)</u>	<u>(0.49)</u>	<u>(0.22)</u>
Total	0.60%	0.33%	1.12%	0.64%
Discount Rate	7.00%	7.00%	7.00%	7.00%

\* Annual Covered Payroll consists of only those State, VaLORS, and SPORS participating in VSDP.

\*\* Includes administrative expenses of \$7,953,476 for 2015.

\*\*\* Includes timing adjustment factor of 1.0192

Note: VSDP is a multiple employer cost sharing plan and the breakdown presented above is provided for illustrative purposes only.



## Section I – Summary of Principal Results (continued)

### VIRGINIA SICKNESS AND DISABILITY PROGRAM LONG-TERM CARE (\$ IN THOUSANDS)

Valuation Date – June 30, 2015	State	SPORS	VaLORS	Total
Number Active (participating in VSDP)	65,130	1,412	7,825	74,367
Number Disabled	2,235	14	593	2,842
Number Ported	<u>1,363</u>	<u>1</u>	<u>50</u>	<u>1,414</u>
Total	68,728	1,427	8,468	78,623
Annual Covered Payroll*	\$3,272,314	\$ 69,528	\$ 285,455	\$3,627,297
LTC Assets: (Allocated by liabilities)				
Market Value	\$ 58,133	\$ 317	\$ 2,695	\$ 61,145
Actuarial Value	\$ 56,712	\$ 309	\$ 2,629	\$ 59,650
LTC Unfunded Actuarial Accrued Liability	\$ (24,074)	\$ (131)	\$ (1,116)	\$ (25,321)
Effective Amortization Period (Years)	19.8	20.6	19.7	19.8
LTC Annual Required Contribution (ARC) in Dollars:				
Normal Cost**	\$ 2,471	\$ 18	\$ 152	\$ 2,641
Accrued Liability	<u>(1,701)</u>	<u>(9)</u>	<u>(79)</u>	<u>(1,789)</u>
Total	\$ 770	\$ 9	\$ 73	\$ 852
LTC Annual Required Contribution as a Percent of Active Payroll***:				
Normal Cost*	0.08%	0.03%	0.05%	0.07%
Accrued Liability	<u>(0.05)</u>	<u>(0.01)</u>	<u>(0.03)</u>	<u>(0.05)</u>
Total	0.03%	0.02%	0.02%	0.02%
Discount Rate	7.00%	7.00%	7.00%	7.00%

\* Annual Covered Payroll consists of only those State, VaLORS, and SPORS participating in VSDP.

\*\* Includes total administrative expenses of \$582,352 for 2015.

\*\*\* Includes timing adjustment factor of 1.0192

Note: VSDP is a multiple employer cost sharing plan and the breakdown presented above is provided for illustrative purposes only.





## Section I – Summary of Principal Results (continued)

### VIRGINIA LOCAL DISABILITY PROGRAM TEACHERS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active (participating in VLDP)	2,796	282
Number Disabled	<u>0</u>	<u>0</u>
Total	2,796	282
Annual Covered Payroll*	\$ 104,087	\$ 9,247
Assets:		
Market Value	\$ 0	\$ 0
Actuarial Value	\$ 48	\$ 0
Unfunded Actuarial Accrued Liability	\$ 129	\$ 11
Effective Amortization Period (Years)	20.1	13.9
Annual Required Contribution (ARC) in Dollars:		
Normal Cost**	\$ 303	\$ 27
Accrued Liability	<u>9</u>	<u>1</u>
Total	\$ 312	\$ 28
ARC as a Percent of Active Payroll***:		
Normal Cost	0.30%	0.17%
Accrued Liability	<u>0.01</u>	<u>0.00</u>
Total	0.31%	0.17%
LTC Contribution Rate****	<u>n/a</u>	<u>0.13%</u>
Total Combined ARC	0.31%	0.30%
Discount Rate	7.00%	7.00%

\* Annual Covered Payroll consists of only those employees participating in VLDP.

\*\* Includes estimated third party administrator expenses of \$3,699 for 2014 and total administrative expenses of \$122,551 for 2015.

\*\*\* Includes timing adjustment factor of 1.0192

\*\*\*\* LTC contribution rate for 2014 was calculated by Milliman. For 2015, LTC and LTD are combined.



## Section I – Summary of Principal Results (continued)

### VIRGINIA LOCAL DISABILITY PROGRAM POLITICAL SUBDIVISIONS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
Number Active (participating in VLDP)	2,917	845
Number Disabled	<u>0</u>	<u>0</u>
Total	2,917	845
Annual Covered Payroll*	\$ 88,350	\$ 24,688
Assets:		
Market Value	\$ 0	\$ 0
Actuarial Value	\$ 30	\$ 0
Unfunded Actuarial Accrued Liability	\$ 106	\$ 48
Effective Amortization Period (Years)	17.9	23.9
Annual Required Contribution (ARC) in Dollars:		
Normal Cost**	\$ 515	\$ 143
Accrued Liability	<u>8</u>	<u>3</u>
Total	\$ 523	\$ 146
ARC as a Percent of Active Payroll***:		
Normal Cost	0.59%	0.46%
Accrued Liability	<u>0.01</u>	<u>0.00</u>
Total	0.60%	0.46%
LTC Contribution Rate****	<u>n/a</u>	<u>0.13%</u>
Total Combined ARC	0.60%	0.59%
Discount Rate	7.00%	7.00%

\* Annual Covered Payroll consists of only those employees participating in VLDP.

\*\* Includes estimated third party administrator expenses of \$34,564 for 2014 and total administrative expenses of \$156,034 for 2015.

\*\*\* Includes timing adjustment factor of 1.0192

\*\*\*\* LTC contribution rate for 2014 was calculated by Milliman. For 2015, LTC and LTD are combined.



## ***Section I – Summary of Principal Results (continued)***

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2. Comments on the valuation results as of June 30, 2015 are given in Section IV and further discussion of the contribution levels is provided 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. The Political Subdivisions have been divided into two groups. Group A consists of: City of Virginia Beach, Henrico County, Prince William County, Chesterfield County, City of Chesapeake, City of Alexandria, City of Hampton, Loudoun County, City of Lynchburg, and the City of Portsmouth. Group B is all other Political Subdivisions not included in Group A.
4. The GLI cost of benefits for members who die in active service is covered on a one-year term basis through an insurance company, and is not included in the actuarial valuation. The term cost for these active members has been provided to CMC by VRS and is currently 14.1¢ per \$1,000 of insurance. This cost is included in Summary of Principal Results to provide a combined contribution rate for deaths in active service and postemployment benefits.
5. Changes to the actuarial assumptions and methods from the last actuarial valuation:
  - The inclusion of VRS administrative expenses to the employer contribution rates to cover plan administrative expenses (i.e., the assumed investment rate of return is net of investment expenses only).
  - A change in the mandatory retirement age for JRS from age 70 to age 73
  - For GLI, the application of a minimum life insurance benefit of \$8,000 (indexed by the Plan 2 COLA amount with the first increase scheduled for July 1, 2016) for members who retire with at least 30 years of creditable service.
  - This is the first actuarial valuation conducted by CMC for the long-term care (LTC) benefit of VSDP and VLDP (the LTC results presented in this report with a date prior to June 30, 2015 were calculated by the prior actuary, Milliman). As such, the decrement assumptions (rates of retirement, termination, disability incidence, and mortality) and the retirement eligibility conditions for each applicable employer group (State, VaLORS, SPORS, Teachers, and Political Subdivisions) were revised to match those used in the valuation of all other VRS postemployment benefits. Similarly, administrative expenses were moved from the liability calculation to the normal cost.
6. The valuation takes into account the effect of amendments to VRS through the valuation date. The main plan provisions of VRS, as summarized in Schedule F, were taken into account in the current valuation.



## Section II – Membership Data

1. Data regarding the membership of VRS for use as a basis of the valuation were furnished by VRS. The following table shows the number of active members and their annual compensation, as of June 30, 2015, on the basis of which the valuation was prepared.

**TABLE 1**  
**THE NUMBER, ANNUAL COVERED PAYROLL, AND INSURANCE**  
**AMOUNT OF GLI MEMBERS AS OF JUNE 30, 2015**  
**(\$ IN THOUSANDS)**

Group	Number	Covered Payroll	Insurance Amount
<b><u>ACTIVE EMPLOYEES</u></b>			
State Employees	75,256	\$ 3,872,724	\$ 7,745,448
Teachers	147,645	7,488,507	14,977,014
VRS Political Subdivisions	105,932	4,540,149	9,080,298
SPORS	1,994	110,543	221,086
JRS	401	61,881	123,762
VaLORS	8,820	330,397	660,794
Life Insurance Only	<u>20,825</u>	<u>1,409,369</u>	<u>2,818,738</u>
Total	360,873	\$17,813,570	\$35,627,140
<b><u>RETIRED OR DISABLED MEMBERS</u></b>			
Service Retirees	148,954	n/a	\$ 6,863,785
Disabled Members	<u>17,194</u>	n/a	<u>939,895</u>
Total	166,148	n/a	\$ 7,803,680

The group shown above as “Life Insurance Only” consists of political subdivisions not providing VRS pension benefits and eligible members in the Optional Retirement Plan (ORP).



**Section II – Membership Data (continued)**

**TABLE 2**

**THE NUMBER AND ANNUAL COVERED PAYROLL  
OF ALL ACTIVE MEMBERS AS OF JUNE 30, 2015  
(\$ IN THOUSANDS)**

<b>OPEB Plan</b>	<b>Number</b>	<b>Covered Payroll</b>
GLI	360,873	\$17,813,570
HIC – State Employees	107,200	6,055,429
HIC – Teachers	147,645	7,488,507
HIC – Participating Political Subdivisions	21,339	900,390
HIC – Constitutional Officers	12,060	584,797
HIC – Social Service Employees	5,262	228,472
HIC – Registrars	213	9,884
VSDP		
State Employees	65,130	3,272,314
SPORS	1,412	69,528
VaLORS	<u>7,825</u>	<u>285,455</u>
Total	74,367	3,627,297
VLDP – Teachers	2,796	104,087
VLDP – Political Subdivisions	2,917	88,350

Schedule G, which can be found at the end of this report, shows the distribution by age and service of the number of active members included in the valuation.



## Section II – Membership Data (continued)

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

**TABLE 3 - SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA**

### GROUP LIFE INSURANCE PROGRAM

Valuation Date	Number	Annual Covered Payroll (\$ in Thousands)	Annual Average Pay	% Change in Average Pay
6/30/2015	360,873	\$17,813,570	\$49,362	1.44%
6/30/2014	360,855	17,559,285	48,660	2.56
6/30/2013	361,080	17,132,176	47,447	2.47
6/30/2012	360,602	16,696,961	46,303	0.36
6/30/2011	358,536	16,542,753	46,139	0.97
6/30/2010	361,644	16,526,260	45,698	(0.10)

### HEALTH INSURANCE CREDIT PROGRAM

Valuation Date	Number	Annual Covered Payroll (\$ in Thousands)	Annual Average Pay	% Change in Average Pay
<b><u>STATE EMPLOYEES</u></b>				
6/30/2015	107,200	\$6,055,429	\$56,487	1.73%
6/30/2014	106,815	5,930,862	55,525	3.57
6/30/2013	106,780	5,724,611	53,611	1.22
6/30/2012	106,517	5,641,862	52,967	(0.91)
6/30/2011	105,186	5,622,425	53,452	5.21
6/30/2010	105,106	5,340,134	50,807	0.45
<b><u>TEACHERS</u></b>				
6/30/2015	147,645	\$7,488,507	\$50,720	1.25%
6/30/2014	146,977	7,362,793	50,095	2.61
6/30/2013	147,257	7,188,884	48,819	2.60
6/30/2012	147,216	7,004,577	47,580	0.46
6/30/2011	146,152	6,922,130	47,363	(1.24)
6/30/2010	148,462	7,119,889	47,958	(0.37)



**Section II – Membership Data (continued)**

**TABLE 3 - SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA (CONTINUED)**

**HEALTH INSURANCE CREDIT PROGRAM**

<b>Valuation Date</b>	<b>Number</b>	<b>Annual Covered Payroll (\$ in Thousands)</b>	<b>Annual Average Pay</b>	<b>% Change in Average Pay</b>
<b><u>PARTICIPATING POLITICAL SUBDIVISIONS</u></b>				
6/30/2015	21,339	\$900,390	\$42,195	0.83%
6/30/2014	20,921	875,485	41,847	1.51
6/30/2013	20,534	846,523	41,225	3.92
6/30/2012	20,416	809,905	39,670	0.43
6/30/2011	19,861	784,481	39,499	2.44
6/30/2010	21,528	830,090	38,559	n/a
<b><u>CONSTITUTIONAL OFFICERS</u></b>				
6/30/2015	12,060	\$584,797	\$48,499	0.86%
6/30/2014	11,796	567,134	48,079	1.22
6/30/2013	11,269	535,261	47,499	4.12
6/30/2012	11,237	512,620	45,619	1.16
6/30/2011	11,731	529,049	45,098	0.24
6/30/2010	11,775	529,786	44,992	n/a
<b><u>SOCIAL SERVICE EMPLOYEES</u></b>				
6/30/2015	5,262	\$228,472	\$43,419	0.97%
6/30/2014	4,895	210,499	43,003	0.46
6/30/2013	4,633	198,320	42,806	3.72
6/30/2012	4,745	195,827	41,270	1.03
6/30/2011	4,951	202,247	40,850	(0.74)
6/30/2010	5,040	207,412	41,153	n/a
<b><u>REGISTRARS</u></b>				
6/30/2015	213	\$9,884	\$46,404	1.93%
6/30/2014	203	9,242	45,527	1.83
6/30/2013	191	8,539	44,707	3.95
6/30/2012	193	8,301	43,010	1.79
6/30/2011	212	8,958	42,255	(0.55)
6/30/2010	206	8,753	42,490	n/a



**Section II – Membership Data (continued)**

**TABLE 3 - SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA (CONTINUED)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM**

Valuation Date	Number	Annual Covered Payroll (\$ in Thousands)	Annual Average Pay	% Change in Average Pay
6/30/2015	74,367	\$3,627,297	\$48,776	1.21%
6/30/2014	74,399	3,585,486	48,193	2.94
6/30/2013	74,178	3,472,669	46,815	0.50
6/30/2012	73,707	3,433,322	46,581	0.08
6/30/2011	72,440	3,371,773	46,546	5.10
6/30/2010	71,529	3,167,849	44,288	0.04

**VIRGINIA LOCAL DISABILITY PROGRAM**

Valuation Date	Number	Annual Covered Payroll (\$ in Thousands)	Annual Average Pay	% Change in Average Pay
<b><u>TEACHERS</u></b>				
6/30/2015	2,796	\$104,087	\$37,227	13.53%
6/30/2014	282	9,247	32,791	n/a
<b><u>POLITICAL SUBDIVISIONS</u></b>				
6/30/2015	2,917	\$88,350	\$30,288	3.67%
6/30/2014	845	24,688	29,217	n/a





## Section II – Membership Data (continued)

3. The following table shows the number of covered retired or disabled members on the rolls as of June 30, 2015 together with the amount of their benefit in force under the plan as of that date.

**TABLE 4 - SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS**  
**GROUP LIFE INSURANCE PROGRAM\***

Valuation Date	Number Added to Rolls	Life Insurance Amount (\$1,000s)	Number Removed from Rolls	Life Insurance Amount (\$1,000s)	Number on Rolls at the End of the Year	Life Insurance Amount (\$1,000s)	Increase in Life Insurance Amount	Average Life Insurance Amount	Increase in Average Life Insurance Amount
6/30/2015	11,429	\$1,275,150	4,519	\$840,576	166,148	\$7,803,680	5.90%	\$46,968	1.49%
6/30/2014	10,922	1,206,647	4,306	843,669	159,238	7,369,106	5.18	46,277	0.81
6/30/2013	10,511	1,148,100	4,203	800,829	152,622	7,006,128	5.22	45,905	0.87
6/30/2012	9,828	1,064,957	3,905	773,058	146,314	6,658,857	4.58	45,511	0.35
6/30/2011	11,216	1,205,369	4,325	714,803	140,391	6,366,958	8.35	45,352	3.03
6/30/2010	10,048	1,074,004	2,577	614,199	133,500	5,876,393	8.49	44,018	2.42

\*This schedule does not include life insurance benefits payable upon the death of an active member.

The numbers shown above include members who are receiving long-term disability benefits from the Virginia Sickness and Disability Program (VSDP). The valuation results include an estimate of retiree liability from the "Life Insurance Only" group.



**Section II – Membership Data (continued)**

**TABLE 4 - SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS (CONTINUED)**  
**HEALTH INSURANCE CREDIT PROGRAM\***

Valuation Date	Number Added to Rols	Health Insurance Credit (\$1,000s)	Number Removed from Rols	Health Insurance Credit (\$1,000s)	Number on Rols at the End of the Year	Health Insurance Credit (\$1,000s)	Increase in Health Insurance Credit	Average Health Insurance Credit	Increase in Average Health Insurance Credit
<b>STATE EMPLOYEES**</b>									
6/30/2015	2,869	\$4,226	1,618	\$2,357	43,440	\$64,524	2.98%	\$1,485	0.00%
6/30/2014	2,652	4,044	1,548	2,212	42,189	62,655	3.01	1,485	0.34
6/30/2013	2,542	3,765	1,503	2,112	41,085	60,823	2.79	1,480	0.14
6/30/2012	2,539	3,784	1,453	2,065	40,046	59,170	2.99	1,478	0.20
6/30/2011	2,684	4,009	1,986	2,841	38,960	57,451	2.08	1,475	0.27
6/30/2010	3,521	5,685	1,279	1,784	38,262	56,283	7.45	1,471	1.17
<b>TEACHERS</b>									
6/30/2015	3,465	\$4,714	1,493	\$2,016	60,093	\$80,257	4.32%	\$1,381	(0.07)%
6/30/2014	3,729	5,075	1,291	1,752	58,121	80,257	4.32	1,381	(0.07)
6/30/2013	3,557	5,016	1,389	1,918	55,683	76,934	4.20	1,382	0.14
6/30/2012	3,240	4,426	1,214	1,649	53,515	73,836	3.91	1,380	0.00
6/30/2011	4,073	5,776	1,163	1,568	51,489	71,059	6.29	1,380	0.29
6/30/2010	3,216	4,545	1,101	1,483	48,579	66,851	4.80	1,376	0.22

\* Excludes eligible deferred vested members

\*\*State Employees includes State, SPORS, JRS, VaLORS, ORP and UVA.



**Section II – Membership Data (continued)**

**TABLE 4 - SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS (CONTINUED)**

**HEALTH INSURANCE CREDIT PROGRAM\***

Valuation Date	Number Added to Rols	Health Insurance Credit (\$1,000s)	Number Removed from Rols	Health Insurance Credit (\$1,000s)	Number on Rols at the End of the Year	Health Insurance Credit (\$1,000s)	Increase in Health Insurance Credit	Average Health Insurance Credit	Increase in Average Health Insurance Credit
<b><u>PARTICIPATING POLITICAL SUBDIVISIONS</u></b>									
6/30/2015	448	\$219	130	\$63	4,342	\$2,147	7.84%	\$494	(0.20)%
6/30/2014	n/a	n/a	n/a	n/a	4,024	1,991	n/a	n/a	n/a
<b><u>CONSTITUTIONAL OFFICERS</u></b>									
6/30/2015	237	\$120	91	\$44	2,990	\$1,518	5.27%	\$508	0.20%
6/30/2014	n/a	n/a	n/a	n/a	2,844	1,442	n/a	n/a	n/a

\* Excludes eligible deferred vested members



**Section II – Membership Data (continued)**

**TABLE 4 - SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS (CONTINUED)**

**HEALTH INSURANCE CREDIT PROGRAM**

Valuation Date	Number Added to Rols	Health Insurance Credit (\$1,000s)	Number Removed from Rols	Health Insurance Credit (\$1,000s)	Number on Rols at the End of the Year	Health Insurance Credit (\$1,000s)	Increase in Health Insurance Credit	Average Health Insurance Credit	Increase in Average Health Insurance Credit
<b><u>SOCIAL SERVICE EMPLOYEES</u></b>									
6/30/2015	171	\$85	32	\$16	1,786	\$903	8.27%	\$506	0.00%
6/30/2014	n/a	n/a	n/a	n/a	1,647	834	n/a	n/a	n/a
<b><u>REGISTRARS</u></b>									
6/30/2015	2	\$ 1	0	\$ 0	59	\$ 31	3.33%	\$525	(0.19)%
6/30/2014	n/a	n/a	n/a	n/a	57	30	n/a	n/a	n/a



**Section II – Membership Data (continued)**

**TABLE 4 - SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS (CONTINUED)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM**

<b>Valuation Date</b>	<b>Number Added to Rols</b>	<b>Annualized LTD Payments (\$1,000s)</b>	<b>Number Removed from Rols</b>	<b>Annualized LTD Payments (\$1,000s)</b>	<b>Number on Rols at the End of the Year</b>	<b>Annualized LTD Payments (\$1,000s)</b>	<b>Increase in Annualized LTD Payments</b>	<b>Average Annualized LTD Payments</b>	<b>Increase in Average Annualized LTD Payments</b>
6/30/2015	466	\$7,923	325	\$4,112	2,842	\$31,126	13.95%	\$10,952	8.30%
6/30/2014	369	6,103	305	4,567	2,701	27,315	5.96	10,113	3.45
6/30/2013	401	6,256	434	4,707	2,637	25,779	6.39	9,776	7.72
6/30/2012	424	6,438	374	5,635	2,670	24,230	3.43	9,075	1.49
6/30/2011	411	6,262	365	6,252	2,620	23,427	0.04	8,942	(1.71)
6/30/2010	445	6,902	265	4,972	2,574	23,417	8.98	9,098	1.37



**Section II – Membership Data (continued)**

**TABLE 4 - SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS (CONTINUED)**

**VIRGINIA LOCAL DISABILITY PROGRAM**

Valuation Date	Number Added to Rols	Annualized LTD Payments (\$1,000s)	Number Removed from Rols	Annualized LTD Payments (\$1,000s)	Number on Rols at the End of the Year	Annualized LTD Payments (\$1,000s)	Increase in Annualized LTD Payments	Average Annualized LTD Payments	Increase in Average Annualized LTD Payments
<b><u>TEACHERS</u></b>									
6/30/2015	0	\$0	0	\$0	0	\$0	0.00%	\$0	0.00%
6/30/2014	0	0	0	0	0	0	0.00	0	0.00
<b><u>POLITICAL SUBDIVISIONS</u></b>									
6/30/2015	0	\$0	0	\$0	0	\$0	0.00%	\$0	0.00%
6/30/2014	0	0	0	0	0	0	0.00	0	0.00



### **Section III – Assets**

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1. Schedule B shows the additions and deductions of each OPEB Plan for the year preceding the valuation date and a reconciliation of the fund balances at market value. As of June 30, 2015, the market value of assets used to determine the actuarial value of assets is shown below.

**TABLE 5**  
**COMPARISON OF MARKET VALUE OF ASSETS AT**  
**JUNE 30, 2015 AND JUNE 30, 2014**  
**(\$ IN THOUSANDS)**

<b>OPEB Plan</b>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
GLI	\$1,162,617	\$1,079,315
HIC – State Employees	67,433	65,201
HIC – Teachers	84,384	82,108
HIC - Participating Political Subdivisions	19,348	18,605
HIC – Constitutional Officers	1,120	2,378
HIC – Social Service Employees	915	1,736
HIC – Registrars	7	31
VSDP	414,518	410,098
VLDP – Teachers	0	0
VLDP – Political Subdivisions	0	0



### **Section III – Assets (continued)**

2. Schedule B shows the development of the five-year market related actuarial value of assets as of June 30, 2015. The following table shows the actuarial value of assets.

**TABLE 6**  
**COMPARISON OF ACTUARIAL VALUE OF ASSETS AT**  
**JUNE 30, 2015 AND JUNE 30, 2014**  
**(\$ IN THOUSANDS)**

<b>OPEB Plan</b>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
GLI	\$1,128,876	\$992,221
HIC – State Employees	67,164	60,645
HIC – Teachers	85,379	79,177
HIC – Participating Political Subdivisions*	19,348	18,605
HIC – Constitutional Officers*	1,120	2,378
HIC – Social Service Employees*	915	1,736
HIC – Registrars*	7	31
VSDP	398,609	376,372
VLDP – Teachers	48	0
VLDP – Political Subdivisions	30	0

\*Actuarial value of assets equal to market value of assets.





## ***Section IV – Comments on Valuation***

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### **GROUP LIFE INSURANCE PROGRAM**

1. The June 30, 2015 valuation shows GLI has total prospective liabilities of \$3,329,457,000, of which \$1,633,937,000 is for the prospective death benefits payable on account of present retired and disabled members, and \$1,695,520,000 is for the prospective postemployment death benefits payable on account of present active members. Against these benefit liabilities, GLI has a total present actuarial value of assets of \$1,128,876,000 as of June 30, 2015. The difference of \$2,200,581,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for GLI on account of postemployment death benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The valuation indicates the normal contribution for GLI is 0.42% of total active covered payroll.
3. Prospective normal contributions have a present value of \$500,353,000. When this amount is subtracted from \$2,200,581,000, which is the present value of the total future contributions to be made by the employers, there remains \$1,700,228,000 as the amount of future accrued liability contributions.
4. For GLI, it is recommended that the accrued liability contribution rate payable by employers on account of retirement benefits be set at 0.55% of total active covered payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$1,700,228,000 over 28.6 years, based on a 7.00% investment rate of return assumption and that aggregate payroll will increase by 3.00% each year. See Schedule C for the amortization schedule for the unfunded accrued liability. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) is 0.97% of total active covered payroll. This rate is equivalent to 40.4¢ per month per \$1,000 of active members' life insurance.



#### ***Section IV – Comments on Valuation (continued)***

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6. This valuation determines the cost of advance funding the postemployment death benefits under GLI. The cost of death benefits for members who die in active service is covered on a one-year term basis through an insurance company and is not included in the actuarial valuation. The term cost for these active members has been provided to CMC by VRS and is currently 14.1¢ per month per \$1,000 of insurance.
7. The sum of the active term cost of 14.1¢ per \$1,000 of active members' life insurance and the postemployment advance funding cost of 40.4¢ per \$1,000 of active members' life insurance is 54.5¢ per \$1,000 of active members' life insurance.
8. GLI experienced a liability loss since the prior valuation of \$42.7 million; primarily due to demographic and salary experience. Assets grew more than expected for an asset gain of \$34.8 million. Combining the liability loss with the asset gain results in an overall loss on the unfunded liability of \$7.9 million.



## ***Section IV – Comments on Valuation (continued)***

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### **HEALTH INSURANCE CREDIT PROGRAM STATE EMPLOYEES (State, JRS, SPORS, VaLORS, ORP, and UVA)**

1. For HIC - State Employees, the June 30, 2015 valuation shows total prospective benefit liabilities of \$1,101,792,000, of which \$594,098,000 is for the prospective retiree health care benefits payable on account of present retired members, members receiving disability benefits, and eligible deferred vested members, and \$507,694,000 is for the prospective retiree health care benefits payable on account of present active members. Against these benefit liabilities, HIC - State Employees has a total present actuarial value of assets of \$67,164,000 as of June 30, 2015. The difference of \$1,034,628,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for HIC - State Employees on account of retiree health care benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution for HIC - State Employees is determined to be 0.31% of total active covered payroll.
3. Prospective normal contributions have a present value of \$125,266,000. When this amount is subtracted from \$1,034,626,000, which is the present value of the total future contributions to be made by the employers, there remains \$909,362,000 as the amount of future accrued liability contributions.
4. For HIC - State Employees, it is recommended that the accrued liability contribution rate payable by employers on account of retiree health care benefits be set at 0.87% of total active covered payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$909,362,000 over 28.0 years, based on a 7.00% investment rate of return and the assumption payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) is 1.18% of total active covered payroll.



#### ***Section IV – Comments on Valuation (continued)***

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6. HIC - State Employees experienced a liability gain since the prior valuation of \$5.5 million; primarily due to demographic changes. The assets grew more than expected for a gain of \$2.8 million, for an overall gain on the unfunded liability of \$8.3 million.



## ***Section IV – Comments on Valuation (continued)***

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### **HEALTH INSURANCE CREDIT PROGRAM TEACHERS**

1. For HIC - Teachers, the June 30, 2015 valuation shows total prospective benefit liabilities of \$1,478,617,000, of which \$786,781,000 is for the prospective retiree health care benefits payable on account of present retired members, members receiving disability benefits, and eligible deferred vested members, and \$691,836,000 is for the prospective retiree health care benefits payable on account of present active members. Against these benefit liabilities, HIC – Teachers has a total present actuarial value of assets of \$85,379,000 as of June 30, 2015. The difference of \$1,393,238,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for HIC - Teachers on account of retiree health care benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution for HIC - Teachers is determined to be 0.26% of total active covered payroll.
3. Prospective normal contributions have a present value of \$153,202,000. When this amount is subtracted from \$1,393,238,000, which is the present value of the total future contributions to be made by the employers, there remains \$1,240,036,000 as the amount of future accrued liability contributions.
4. For HIC - Teachers, it is recommended that the accrued liability contribution rate payable by employers on account of retiree health care benefits be set at 0.97% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$1,240,036,000 over 27.8 years, based on a 7.00% investment rate of return and the assumption payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) is 1.23% of total active covered payroll.



#### ***Section IV – Comments on Valuation (continued)***

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6. HIC - Teachers experienced a liability gain since the prior valuation of \$0.7 million; primarily due to demographic changes. The assets grew more than expected for a gain of \$1.3 million; for an overall gain on the unfunded liability of \$2.0 million.



## ***Section IV – Comments on Valuation (continued)***

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### **HEALTH INSURANCE CREDIT PROGRAM PARTICIPATING POLITICAL SUBDIVISIONS**

1. For HIC - Participating Political Subdivisions, the June 30, 2015 valuation shows total prospective benefit liabilities of \$43,437,000, of which \$19,286,000 is for the prospective retiree health care benefits payable on account of present retired members, members receiving disability benefits, and eligible deferred vested members, and \$24,151,000 is for the prospective retiree health care benefits payable on account of present active members. Against these benefit liabilities, HIC - Participating Political Subdivisions has, in aggregate, a total present market value of assets of \$19,348,000 as of June 30, 2015. The difference of \$24,089,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for HIC - Participating Political Subdivisions on account of retiree health care benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The arithmetic average normal contribution for HIC - Participating Political Subdivisions is determined to be 0.14% of total active covered payroll.
3. Prospective normal contributions have a present value of \$6,525,000. When this amount is subtracted from \$24,089,000, which is the present value of the total future contributions to be made by the employers, there remains \$17,564,000 as the amount of future accrued liability contributions.
4. For HIC - Participating Political Subdivisions, it is recommended that the arithmetic average accrued liability contribution rate payable by employers on account of retiree health care benefits be set at 0.17% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$17,564,000 over 27.8 years, based on a 7.00% investment rate of return and the assumption payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The arithmetic average total annual required contribution (ARC) is 0.31% of total active covered payroll.



#### ***Section IV – Comments on Valuation (continued)***

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6. HIC - Participating Political Subdivisions experienced a liability loss since the prior valuation of \$0.3 million; primarily due to demographic changes. The assets grew less than expected for a loss of \$0.6 million; for an overall loss on the unfunded liability of \$0.9 million.





## ***Section IV – Comments on Valuation (continued)***

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### **HEALTH INSURANCE CREDIT PROGRAM CONSTITUTIONAL OFFICERS**

1. For HIC - Constitutional Officers, the June 30, 2015 valuation shows total prospective benefit liabilities of \$31,014,000, of which \$13,802,000 is for the prospective retiree health care benefits payable on account of present retired members, members receiving disability benefits, and eligible deferred vested members, and \$17,212,000 is for the prospective retiree health care benefits payable on account of present active members. Against these benefit liabilities, HIC - Constitutional Officers has a total present actuarial value of assets of \$1,120,000 as of June 30, 2015. The difference of \$29,894,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for HIC - Constitutional Officers on account of retiree health care benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution for HIC - Constitutional Officers is determined to be 0.10% of total active covered payroll.
3. Prospective normal contributions have a present value of \$4,314,000. When this amount is subtracted from \$29,894,000, which is the present value of the total future contributions to be made by the employers, there remains \$25,580,000 as the amount of future accrued liability contributions.
4. For HIC - Constitutional Officers, it is recommended that the accrued liability contribution rate payable by employers on account of retiree health care benefits be set at 0.26% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$25,580,000 over 27.6 years, based on a 7.00% investment rate of return and the assumption payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) is 0.36% of total active covered payroll.
6. HIC - Constitutional Officers experienced a liability gain since the prior valuation of \$0.2 million; primarily due to demographic changes. The assets grew less than expected for a loss of \$0.1 million; for an overall gain on the unfunded liability of \$0.1 million.



## ***Section IV – Comments on Valuation (continued)***

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### **HEALTH INSURANCE CREDIT PROGRAM SOCIAL SERVICE EMPLOYEES**

1. For HIC - Social Service Employees, the June 30, 2015 valuation shows total prospective benefit liabilities of \$15,081,000, of which \$8,357,000 is for the prospective retiree health care benefits payable on account of present retired members, members receiving disability benefits, and eligible deferred vested members, and \$6,724,000 is for the prospective retiree health care benefits payable on account of present active members. Against these benefit liabilities, HIC - Social Service Employees has a total present actuarial value of assets of \$915,000 as of June 30, 2015. The difference of \$14,166,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for HIC - Social Service Employees on account of retiree health care benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution for HIC - Social Service Employees is determined to be 0.10% of total active covered payroll.
3. Prospective normal contributions have a present value of \$1,674,000. When this amount is subtracted from \$14,166,000, which is the present value of the total future contributions to be made by the employers, there remains \$12,492,000 as the amount of future accrued liability contributions.
4. For HIC - Social Service Employees, it is recommended that the accrued liability contribution rate payable by employers on account of retiree health care benefits be set at 0.32% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$12,492,000 over 27.8 years, based on a 7.00% investment rate of return and the assumption payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) is 0.42% of total active covered payroll.



#### ***Section IV – Comments on Valuation (continued)***

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6. HIC - Social Services Employees experienced a liability loss since the prior valuation of \$0.2 million; primarily due to demographic changes. The assets grew less than expected for a loss of \$0.1 million; for an overall loss on the unfunded liability of \$0.3 million.



## ***Section IV – Comments on Valuation (continued)***

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### **HEALTH INSURANCE CREDIT PROGRAM REGISTRARS**

1. For HIC - Registrars, the June 30, 2015 valuation shows total prospective benefit liabilities of \$572,000, of which \$281,000 is for the prospective retiree health care benefits payable on account of present retired members, members receiving disability benefits, and eligible deferred vested members, and \$291,000 is for the prospective retiree health care benefits payable on account of present active members. Against these benefit liabilities, HIC - Registrars has a total present actuarial value of assets of \$7,000 as of June 30, 2015. The difference of \$565,000 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. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for HIC - Registrars on account of retiree health care benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution for Registrars is determined to be 0.11% of total active covered payroll.
3. Prospective normal contributions have a present value of \$68,000. When this amount is subtracted from \$565,000, which is the present value of the total future contributions to be made by the employers, there remains \$497,000 as the amount of future accrued liability contributions.
4. For HIC - Registrars, it is recommended that the accrued liability contribution rate payable by employers on account of retiree health care benefits be set at 0.30% of salary. This rate is sufficient to liquidate the unfunded accrued liability of \$497,000 over 27.1 years, based on a 7.00% investment rate of return and the assumption payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) is 0.41% of total active covered payroll.
6. HIC - Registrars experienced a liability loss since the prior valuation of \$3.0 thousand; primarily due to demographic changes. The assets grew more than expected for a gain of \$0.0 thousand; for an overall loss on the unfunded liability of \$3.0 thousand.



## ***Section IV – Comments on Valuation (continued)***

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### **VIRGINIA SICKNESS AND DISABILITY PROGRAM**

1. The June 30, 2015 valuation of VSDP shows total prospective benefit liabilities of \$421,181,000, of which \$156,796,000 is for the prospective benefits payable on account of present disabled retirees, and \$264,385,000 is for the prospective benefits payable on account of present active members. Against these liabilities, LTD and LTC benefits have present assets of \$398,609,000 as of June 30, 2015. The difference of \$22,572,000 between the total liabilities and the total present actuarial value of assets presents the present value of contributions to be made in the future on account of benefits. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for VSDP on account of disabled retiree benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution is determined to be 0.93% of total active covered payroll.
3. Prospective normal contributions have a present value of \$185,934,000. When this amount is subtracted from \$22,572,000, which is the present value of the total future contributions to be made by the employers, a surplus of \$163,362,000 results.
4. It is recommended that the accrued liability contribution rate payable by employers on account of LTD and LTC benefits be set at -0.27% of total active covered payroll. This rate includes an amount sufficient to liquidate the surplus of \$163,362,000 over 25.9 years, based on a 7.00% investment rate of return and the assumption that the payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) for LTD benefits and LTC benefits, combined, is 0.66% of total active covered payroll.
6. VSDP experienced a liability gain since the prior valuation of \$19.7 million; primarily due to a change in assumptions and methods in the valuation of the LTC benefits (the use of standard VRS decrement assumptions and retirement eligibility conditions, moving expenses from the liability calculation to a load to the normal cost) . The assets grew more than expected for a gain of \$9.4 million; for an overall gain on the unfunded liability of \$29.1 million.



## ***Section IV – Comments on Valuation (continued)***

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### **VIRGINIA LOCAL DISABILITY PROGRAM TEACHERS**

1. The June 30, 2015 valuation of VLDP – Teachers shows total prospective benefit liabilities of \$1,936,000, of which \$15,000 is for the prospective benefits payable on account of present LTD and LTC inactive, and \$1,921,000 is for the prospective benefits payable on account of present active members. Against these liabilities, LTD and LTC benefits have present assets of \$48,000 as of June 30, 2015. The difference of \$1,888,000 between the total liabilities and the total present actuarial value of assets presents the present value of contributions to be made in the future on account of benefits. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for VLDP – Teachers on account of disabled retiree benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution is determined to be 0.30% of total active covered payroll.
3. Prospective normal contributions have a present value of \$1,759,000. When this amount is subtracted from \$1,888,000, which is the present value of the total future contributions to be made by the employers, there remains \$129,000 as the amount of future accrued liability contributions.
4. For VLDP – Teachers, it is recommended that the accrued liability contribution rate payable by employers on account of LTD and LTC benefits be set at 0.01% of total active covered payroll. This rate includes an amount sufficient to liquidate the unfunded accrued liability of \$129,000 over 20.1 years, based on a 7.00% investment rate of return and the assumption that the payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) for LTD benefits and LTC benefits, combined, is 0.31% of total active covered payroll.
6. VLDP – Teachers experienced a liability loss since the prior valuation of \$426.1 thousand; primarily due to administrative expenses greater than expected. The assets grew less than expected for a loss of \$46.2 thousand; for an overall loss on the unfunded liability of \$472.3 thousand.



## ***Section IV – Comments on Valuation (continued)***

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### **VIRGINIA LOCAL DISABILITY PROGRAM POLITICAL SUBDIVISIONS**

1. The June 30, 2015 valuation for VLDP – Political Subdivisions shows total prospective benefit liabilities of \$2,813,000, of which \$30,000 is for the prospective benefits payable on account of present LTD and LTC inactive, and \$2,783,000 is for the prospective benefits payable on account of present active members. Against these liabilities, LTD and LTC benefits have present assets of \$30,000 as of June 30, 2015. The difference of \$2,783,000 between the total liabilities and the total present actuarial value of assets presents the present value of contributions to be made in the future on account of benefits. Schedule A of this report outlines the results of the actuarial valuation.
2. The contributions for VLDP – Political Subdivisions on account of disabled retiree benefits consist of normal contributions and accrued liability contributions. The normal contribution is equal to the actuarial present value of benefits accruing during the current year, plus administrator expenses. The normal contribution is determined to be 0.59% of total active covered payroll.
3. Prospective normal contributions have a present value of \$2,677,000. When this amount is subtracted from \$2,783,000, which is the present value of the total future contributions to be made by the employers, there remains \$106,000 as the amount of future accrued liability contributions.
4. For VLDP – Political Subdivisions, it is recommended that the accrued liability contribution rate payable by employers on account of LTD and LTC benefits be set at 0.01% of total active covered payroll. This rate includes an amount sufficient to liquidate the unfunded accrued liability of \$106,000 over 17.9 years, based on a 7.00% investment rate of return and the assumption that the payroll will increase by 3.00% annually. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
5. The total annual required contribution (ARC) for LTD benefits and LTC benefits, combined, is 0.60% of total active covered payroll.
6. VLDP – Political Subdivisions experienced a liability loss since the prior valuation of \$326.0 thousand; primarily due to administrative expenses greater than expected. The assets grew less than expected for a loss of \$98.3 thousand; for an overall loss on the unfunded liability of \$424.3 thousand.



## **Section V – Contribution Rates**

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1. The actuarially determined employer contribution (ARC) rates based on the June 30, 2015 actuarial valuation for each OPEB Plan are shown in the following table:

**TABLE 7**

**ANNUAL REQUIRED CONTRIBUTION (ARC) EXPRESSED  
AS A PERCENTAGE OF ACTIVE MEMBER COVERED PAYROLL**

<b>OPEB Plan</b>	<b>June 30, 2015</b>
GLI*	1.31%
HIC – State Employees	1.18
HIC – Teachers	1.23
HIC – Participating Political Subdivisions**	0.31
HIC – Constitutional Officers	0.36
HIC – Social Service Employees	0.42
HIC – Registrars	0.41
VSDP	0.66
VLDP – Teachers	0.31
VLDP – Political Subdivisions	0.60

\* The contribution rate for GLI includes an adjustment of 0.34% for active group life insurance, see Section I for additional detail.

\*\* Arithmetic average of individual employer rates.





## Section V – Contribution Rates (continued)

2. The table below shows the normal contribution rate, the unfunded actuarial accrued liability (UAAL), amortization payment rate, and the resulting actuarially required contribution (ARC) rate for each OPEB Plan.

**TABLE 8**  
**EMPLOYER CONTRIBUTION RATE EXPRESSED**  
**AS PERCENT OF ACTIVE MEMBER COVERED PAYROLL**

OPEB Plan	Rate as a Percent of Covered Payroll		
	Normal Cost* (a)	UAAL Amortization Payment (b)	Annual Required Contribution (c) = (a) + (b)
GLI	0.76%**	0.55%	1.31%
HIC – State Employees	0.31	0.87	1.18
HIC – Teachers	0.26	0.97	1.23
HIC – Participating Political Subdivisions***	0.14	0.17	0.31
HIC – Constitutional Officers	0.10	0.26	0.36
HIC – Social Service Employees	0.10	0.32	0.42
HIC – Registrars	0.11	0.30	0.41
VSDP	0.93	(0.27)	0.66
VLDP – Teachers	0.30	0.01	0.31
VLDP – Political Subdivisions	0.59	0.01	0.60

\* Includes total administrative expenses.

\*\* The normal cost rate for GLI includes an addition of 0.34% for active group life insurance, see Section I for additional detail.

\*\*\* Arithmetic average of individual employer rates.



### **Section V – Contribution Rates (continued)**

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3. Contributions to GLI consist of one-year term active member life insurance provided through an insurance company, and advance funding payments to support postemployment life insurance. On the basis of the valuation, we are recommending a total contribution rate of 54.5¢ per month per \$1,000 of active members' life insurance. The recommended contributions are summarized in the following table:

**TABLE 9**

**GROUP LIFE INSURANCE PROGRAM  
EMPLOYER CONTRIBUTION RATE EXPRESSED  
AS CENTS PER \$1,000 OF LIFE INSURANCE COVERAGE**

<b>Recommended Contribution</b>	<b>Rate</b>	
	<b>¢ per \$1,000 of Active Members' Life Insurance</b>	<b>% of Covered Payroll</b>
Active Member Term Cost	14.1¢	0.34%
Postemployment Advance Funding	<u>40.4¢</u>	<u>0.97%</u>
Total	54.5¢	1.31%



## **Section VI – Accounting Information**

1. GASB 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of VRS and the employers. 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, 2015**

<b>OPEB Plan</b>	<b>Active Members</b>	<b>Retired, Disabled Members or Eligible Deferred Vested Members</b>	<b>Total</b>
GLI	360,873	166,148	527,021
HIC – State Employees	107,200	45,003	152,203
HIC – Teachers	147,645	61,956	209,601
HIC – Participating Political Subdivisions	21,339	4,667	26,006
HIC - Constitutional Officers	12,060	2,990	15,050
HIC – Social Service Employees	5,262	1,786	7,048
HIC – Registrars	213	59	272
VSDP*	74,367	4,256	78,623
VLDP* – Teachers	2,796	0	2,796
VLDP* – Political Subdivisions	2,917	0	2,917

\* LTD only.



## Section VI – Accounting Information (continued)

2. Another such item is the Schedule of Funding Progress, shown in the following table:

### SCHEDULE OF FUNDING PROGRESS GROUP LIFE INSURANCE PROGRAM (\$ IN THOUSANDS)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2015	\$1,128,876	\$2,829,104	\$1,700,228	39.90%	\$17,813,570	9.54%
6/30/2014	992,221	2,701,509	1,709,288	36.73	17,559,285	9.73
6/30/2013	836,547	2,571,691	1,735,144	32.53	17,132,176	10.13
6/30/2012	755,889	2,458,310	1,702,421	30.75	16,696,961	10.20
6/30/2011	852,424	2,358,977	1,506,553	36.14	16,542,753	9.11
6/30/2010	928,920	2,245,315	1,316,395	41.37	16,526,260	7.97

### SCHEDULE OF FUNDING PROGRESS HEALTH INSURANCE CREDIT PROGRAM (\$ IN THOUSANDS)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
<b>STATE EMPLOYEES</b>						
6/30/2015	\$ 67,164	\$ 976,526	\$ 909,362	6.88%	\$6,055,429	15.02%
6/30/2014	60,645	962,142	901,497	6.30	5,930,862	15.20
6/30/2013	54,773	944,582	889,809	5.80	5,724,611	15.54
6/30/2012	55,510	917,168	861,658	6.05	5,641,862	15.27
6/30/2011	110,791	896,560	785,769	12.36	5,622,425	13.98
6/30/2010	159,163	895,041	735,878	17.78	5,340,134	13.78
<b>TEACHERS</b>						
6/30/2015	\$ 85,379	\$1,325,415	\$1,240,036	6.44%	\$7,488,507	16.56%
6/30/2014	79,177	1,297,721	1,218,544	6.10	7,362,793	16.55
6/30/2013	67,012	1,257,792	1,190,780	5.33	7,188,884	16.56
6/30/2012	58,286	1,269,070	1,210,784	4.59	7,004,577	17.29
6/30/2011	85,933	1,230,205	1,144,272	6.99	6,922,130	16.53
6/30/2010	108,187	1,202,438	1,094,251	9.00	7,119,889	15.37



**Section VI – Accounting Information (continued)**

**SCHEDULE OF FUNDING PROGRESS  
HEALTH INSURANCE CREDIT PROGRAM  
(\$ IN THOUSANDS)**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b - a)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b - a) / c)</b>
<b><u>PARTICIPATING POLITICAL SUBDIVISIONS</u></b>						
6/30/2015	\$19,348	\$36,912	\$17,564	52.42%	\$900,390	1.95%
<b><u>CONSTITUTIONAL OFFICERS</u></b>						
6/30/2015	\$ 1,120	\$26,700	\$25,580	4.19%	\$584,797	4.37%
<b><u>SOCIAL SERVICE EMPLOYEES</u></b>						
6/30/2015	\$ 915	\$13,407	\$12,492	6.82%	\$228,472	5.47%
<b><u>REGISTRARS</u></b>						
6/30/2015	\$ 7	\$ 504	\$ 497	1.39%	\$ 9,884	5.03%



## Section VI – Accounting Information (continued)

### SCHEDULE OF FUNDING PROGRESS VIRGINIA SICKNESS AND DISABILITY PROGRAM (\$ IN THOUSANDS)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2015**	\$398,609	\$235,247	\$(163,362)	169.44%	\$3,627,297	(4.50)%
6/30/2014	325,354	188,538	(136,816)	172.57	3,585,486	(3.82)
6/30/2013	313,480	182,946	(130,534)	171.35	3,472,669	(3.76)
6/30/2012	305,170	261,729	(43,441)	116.60	3,433,322	(1.27)
6/30/2011	330,079	262,844	(67,235)	125.58	3,371,773	(1.99)
6/30/2010	302,683	281,979	(20,704)	107.34	3,167,849	(0.65)

\* Actuarial cost method of Projected Unit Credit prior to 6/30/2013 and Entry Age Normal on 6/30/2013 and later.

\*\* Includes Long-Term Care. Values prior to 6/30/2015 reflect Long-Term Disability only.

### SCHEDULE OF FUNDING PROGRESS VIRGINIA LOCAL DISABILITY PROGRAM (\$ IN THOUSANDS)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
<b>TEACHERS</b>						
6/30/2015*	\$48	\$177	\$129	27.12%	\$104,087	0.12%
6/30/2014	0	11	11	0.00	9,247	0.12%
<b>POLITICAL SUBDIVISIONS</b>						
6/30/2015*	\$30	\$136	\$106	22.06%	\$88,350	0.12%
6/30/2014	0	48	48	0.00	24,688	0.19%

\* Includes Long-Term Care. Values prior to 6/30/2015 reflect Long-Term Disability only.



## Section VI – Accounting Information (continued)

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows:

All OPEB Plans	
Valuation Date	6/30/2015
Amortization Method	Level Percentage of Pay, Closed
Payroll Growth Rate	3.00%
Actuarial Assumptions:	
Investment Rate of Return*	7.00%
*Includes inflation at	2.50%

The assumed investment rate of return reflects the fact a trust has been established to set aside assets that are legally held exclusively for postemployment benefits.

OPEB Plan	Actuarial Cost Method
GLI	Entry Age Normal
HIC – State Employees	Entry Age Normal
HIC – Teachers	Entry Age Normal
HIC – Participating Political Subdivisions	Entry Age Normal
HIC - Constitutional Officers	Entry Age Normal
HIC – Social Service Employees	Entry Age Normal
HIC – Registrars	Entry Age Normal
VSDP	LTD: Entry Age Normal LTC: Projected Unit Credit
VLDP – Teachers	LTD: Entry Age Normal LTC: Projected Unit Credit
VLDP – Political Subdivisions	LTD: Entry Age Normal LTC: Projected Unit Credit

OPEB Plan	Effective Amortization Period (Years)
GLI	28.6
HIC – State Employees	28.0
HIC – Teachers	27.8
HIC – Participating Political Subdivisions	27.8
HIC - Constitutional Officers	27.6
HIC – Social Service Employees	27.8
HIC – Registrars	27.1
VSDP	25.9
VLDP – Teachers	20.1
VLDP – Political Subdivisions	17.9



## Section VI – Accounting Information (continued)

OPEB Plan	Asset Valuation Method
GLI	5-year Smoothed Market
HIC – State Employees	5-year Smoothed Market
HIC – Teachers	5-year Smoothed Market
HIC – Participating Political Subdivisions	Market Value of Assets
HIC – Constitutional Officers	Market Value of Assets
HIC – Social Service Employees	Market Value of Assets
HIC – Registrars	Market Value of Assets
VSDP	5-year Smoothed Market
VLDP – Teachers	5-year Smoothed Market
VLDP – Political Subdivisions	5-year Smoothed Market

OPEB Plan	Benefit Increases
GLI	\$8,000 Minimum Benefit 2.25%
VSDP VLDP – Teachers VLDP – Political Subdivisions	LTD Post-Disablement Benefit Increases Plan 1: 2.50% Plan 2: 2.25%

4. On June 2, 2015, GASB Statement No. 74 and GASB Statement No. 75 (GASB 74 and 75) were unanimously adopted by the GASB Board. The disclosure requirements of GASB 74 and 75 will be similar to the disclosure requirements for pension benefits under GASB Statement No. 67 and GASB Statement No. 68. GASB 74 relates to accounting disclosures for plan sponsors and, as such, replaces GASB 43 beginning with fiscal years ending June 30, 2017. GASB 75 relates to accounting disclosures for contributing employers and, as such, replaces GASB 45 beginning with fiscal years ending June 30, 2018. GASB 74 and 75 will require applicable OPEB plan sponsors and contributing employers to disclose the net OPEB liability on the statement of financial position and book an accounting expense based upon the entry age normal actuarial cost method. Beyond the use of a specified actuarial cost method, GASB's new disclosure standards will also require the discount rate used to calculate liabilities to be based upon the yield of 20-year, tax-exempt municipal bonds and the expected rate of return on plan assets, to the extent plan assets are projected to be available for the payment of future benefits. Additionally, GASB 74 and 75 will bring about many other changes in the liability valuation and accounting disclosure processes





## ***Section VI – Accounting Information (continued)***

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currently in place which are expected to significantly impact data collection, timing, and effort. As details for the new GASB OPEB disclosure standards emerge, planning and coordination between plan sponsors, contributing employers, actuaries, and auditors is recommended.



## Section VII – Derivation of Experience Gains and Losses

### CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING FISCAL YEAR ENDING 2015 GROUP LIFE INSURANCE PROGRAM (\$ IN MILLIONS)

Fiscal Year 2015		
<b>1. Beginning of Year:</b>		
(a) Actuarial Accrued Liability (AAL)	\$	2,701.5
(b) Normal Cost	\$	72.6
(c) Benefit Payments	\$	175.8
<b>2. End of Year:</b>		
(a) Expected AAL [[ $(1a) + (1b)$ ] $\times$ 1.07] – [ $(1c) \times (1 + [0.07 \times 0.50])$ ]	\$	2,786.4
(b) Actual AAL	\$	2,829.1
<b>3. Total AAL Gain (or Loss) (2a) – (2b))</b>	\$	(42.7)
<b>4. Actuarial Value of Assets (AVA) Beginning of Year</b>	\$	992.2
<b>5. Net external cash flow during the year</b>	\$	31.3
<b>6. End of Year:</b>		
(a) Expected AVA [[ $(4) \times 1.07$ ] + [ $(5) \times (1 + [0.07 \times 0.50])$ ]]	\$	1,094.1
(b) Actual AVA	\$	1,128.9
<b>7. AVA Gain (or Loss) (6b) – (6a)</b>	\$	34.8
<b>8. Expected UAAL at End of Year (2a) – (6a)</b>	\$	1,692.3
<b>9. Actual UAAL at End of Year (2b) – (6b)</b>	\$	1,700.2
<b>10. UAAL Gain (or Loss) (8) – (9)</b>	\$	(7.9)



## Section VII – Derivation of Experience Gains and Losses (continued)

### CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING FISCAL YEAR 2015 HEALTH INSURANCE CREDIT PROGRAM (\$ IN MILLIONS)

Fiscal Year 2015	State Employees*	Teachers
<b>1. Beginning of Year:</b>		
(a) Actuarial Accrued Liability (AAL)	\$ 962.1	\$ 1,297.7
(b) Normal Cost	\$ 18.0	\$ 18.6
(c) Benefit Payments	\$ 64.4	\$ 79.5
<b>2. End of Year:</b>		
(a) Expected AAL [[ (1a) + (1b) ] x 1.07] – [(1c) x (1 + [0.07 x 0.50])]	\$ 982.0	\$ 1,326.1
(b) Actual AAL	\$ 976.5	\$ 1,325.4
<b>3. Total AAL Gain (or Loss) (2a) – (2b)</b>	\$ 5.5	\$ 0.7
<b>4. Actuarial Value of Assets (AVA) Beginning of Year</b>	\$ 60.6	\$ 79.2
<b>5. Net external cash flow during the year</b>	\$ (0.4)	\$ (0.6)
<b>6. End of Year:</b>		
(a) Expected AVA [(4) x 1.07] + [(5) x (1 + [0.07 x 0.50])]	\$ 64.4	\$ 84.1
(b) Actual AVA	\$ 67.2	\$ 85.4
<b>7. AVA Gain (or Loss) (6b) – (6a)</b>	\$ 2.8	\$ 1.3
<b>8. Expected UAAL at End of Year (2a) – (6a)</b>	\$ 917.6	\$ 1,242.0
<b>9. Actual UAAL at End of Year (2b) – (6b)</b>	\$ 909.3	\$ 1,240.0
<b>10. UAAL Gain (or Loss) (8) – (9)</b>	\$ 8.3	\$ 2.0

\*State Employees include State, JRS, SPORS, VaLORS, ORP, and UVA employees.



## Section VII – Derivation of Experience Gains and Losses (continued)

### CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING FISCAL YEAR 2015 HEALTH INSURANCE CREDIT PROGRAM (\$ IN MILLIONS)

Fiscal Year 2015	Participating Political Subdivisions	Constitutional Officers
<b>1. Beginning of Year:</b>		
(a) Actuarial Accrued Liability (AAL)	\$ 35.2	\$ 25.9
(b) Normal Cost	\$ 0.9	\$ 0.6
(c) Benefit Payments	\$ 2.0	\$ 1.4
<b>2. End of Year:</b>		
(a) Expected AAL [[ (1a) + (1b) ] x 1.07] – [(1c) x (1 + [0.07 x 0.50])]	\$ 36.6	\$ 26.9
(b) Actual AAL	\$ 36.9	\$ 26.7
<b>3. Total AAL Gain (or Loss) (2a) – (2b)</b>	\$ (0.3)	\$ 0.2
<b>4. Actuarial Value of Assets (AVA) End of Prior Year</b>	\$ 18.6	\$ 2.4
<b>5. Adjustment to Actuarial Value of Assets</b>	\$ 0.0	\$ (2.0)
<b>6. Actuarial Value of Assets (AVA) Beginning of Year</b>	\$ 18.6	\$ 0.4
<b>7. Net external cash flow during the year</b>	\$ (0.0)	\$ (0.8)
<b>8. End of Year:</b>		
(a) Expected AVA [(6) x 1.07] + [(7) x (1 + [0.07 x 0.50])]	\$ 19.9	\$ 1.2
(b) Actual AVA	\$ 19.3	\$ 1.1
<b>9. AVA Gain (or Loss) (8b) – (8a)</b>	\$ (0.6)	\$ (0.1)
<b>10. Expected UAAL at End of Year (2a) – (8a)</b>	\$ 16.7	\$ 25.7
<b>11. Actual UAAL at End of Year (2b) – (8b)</b>	\$ 17.6	\$ 25.6
<b>12. UAAL Gain (or Loss) (10) – (11)</b>	\$ (0.9)	\$ 0.1



## Section VII – Derivation of Experience Gains and Losses (continued)

### CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING FISCAL YEAR 2015 HEALTH INSURANCE CREDIT PROGRAM (\$ IN MILLIONS)

Fiscal Year 2015	Social Service Employees	Registrars
<b>1. Beginning of Year:</b>		
(a) Actuarial Accrued Liability (AAL)	\$ 12.9	\$ 0.5
(b) Normal Cost	\$ 0.2	\$ 0.0
(c) Benefit Payments	\$ 0.8	\$ 0.0
<b>2. End of Year:</b>		
(a) Expected AAL $[(1a) + (1b)] \times 1.07 - [(1c) \times (1 + [0.07 \times 0.50])]$	\$ 13.2	\$ 0.5
(b) Actual AAL	\$ 13.4	\$ 0.5
<b>3. Total AAL Gain (or Loss) (2a) – (2b)</b>	\$ (0.2)	\$ 0.0
<b>4. Actuarial Value of Assets (AVA) End of Prior Year</b>	\$ 1.7	\$ 0.0
<b>5. Adjustment to Actuarial Value of Assets</b>	\$ 0.9	\$ 0.0
<b>6. Actuarial Value of Assets (AVA) Beginning of Year</b>	\$ 0.8	\$ 0.0
<b>7. Net external cash flow during the year</b>	\$ 0.1	\$ 0.0
<b>8. End of Year:</b>		
(a) Expected AVA $[(6) \times 1.07] + [(7) \times (1 + [0.07 \times 0.50])]$	\$ 1.0	\$ 0.0
(b) Actual AVA	\$ 0.9	\$ 0.0
<b>9. AVA Gain (or Loss) (8b) – (8a)</b>	\$ (0.1)	\$ 0.0
<b>10. Expected UAAL at End of Year (2a) – (8a)</b>	\$ 12.2	\$ 0.5
<b>11. Actual UAAL at End of Year (2b) – (8b)</b>	\$ 12.5	\$ 0.5
<b>12. UAAL Gain (or Loss) (10) – (11)</b>	\$ (0.3)	\$ 0.0



## Section VII – Derivation of Experience Gains and Losses (continued)

### CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING FISCAL YEAR 2015 VIRGINIA SICKNESS AND DISABILITY PROGRAM (\$ IN MILLIONS)

Fiscal Year 2015		
<b>1. Beginning of Year:</b>		
(a) Actuarial Accrued Liability (AAL)	\$	239.2
(b) Normal Cost	\$	34.9
(c) Benefit Payments	\$	37.1
<b>2. End of Year:</b>		
(a) Expected AAL	\$	254.9
$[(1a) + (1b)] \times 1.07 - [(1c) \times (1 + [0.07 \times 0.50])]$		
(b) Actual AAL	\$	235.2
<b>3. Total AAL Gain (or Loss) (2a) – (2b)</b>	\$	19.7
<b>4. Actuarial Value of Assets (AVA) Beginning of Year</b>	\$	376.4
<b>5. Net external cash flow during the year</b>	\$	(13.1)
<b>6. End of Year:</b>		
(a) Expected AVA	\$	389.2
$[(4) \times 1.07] + [(5) \times (1 + [0.07 \times 0.50])]$		
(b) Actual AVA	\$	398.6
<b>7. Total AVA Gain (or Loss) (6a) – (6b)</b>	\$	9.4
<b>8. Expected UAAL at End of Year</b>	\$	(134.3)
(2a) – (6a)		
<b>9. Actual UAAL at End of Year</b>	\$	(163.4)
(2b) – (6b)		
<b>10. UAAL Gain (or Loss)</b>	\$	29.1
(8) – (9)		



## Section VII – Derivation of Experience Gains and Losses (continued)

### CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING FISCAL YEAR 2015 VIRGINIA LOCAL DISABILITY PROGRAM (\$ IN THOUSANDS)

Fiscal Year 2015	Teachers	Political Subdivisions
<b>1. Beginning of Year:</b>		
(a) Actuarial Accrued Liability (AAL)	\$ 11.0	\$ 48.0
(b) Normal Cost	\$ 27.0	\$ 143.0
(c) Benefit Payments (including third party expenses)	\$ 249.1	\$ 381.0
<b>2. End of Year:</b>		
(a) Expected AAL $[(1a) + (1b)] \times 1.07 - [(1c) \times (1 + [0.07 \times 0.50])]$	\$ (249.1)	\$ (190.0)
(b) Actual AAL	\$ 177.0	\$ 136.0
<b>3. Total AAL Gain (or Loss) (2a) – (2b)</b>	\$ (426.1)	\$ (326.0)
<b>4. Actuarial Value of Assets (AVA) Beginning of Year</b>	\$ 0.0	\$ 0.0
<b>5. Net external cash flow during the year</b>	\$ 91.0	\$ 124.0
<b>6. End of Year:</b>		
(a) Expected AVA $[(4) \times 1.07] + [(5) \times (1 + [0.07 \times 0.50])]$	\$ 94.2	\$ 128.3
(b) Actual AVA	\$ 48.0	\$ 30.0
<b>7. AVA Gain (or Loss) (6b) – (6a)</b>	\$ (46.2)	\$ (98.3)
<b>8. Expected UAAL at End of Year (2a) – (6a)</b>	\$ (343.3)	\$ (318.3)
<b>9. Actual UAAL at End of Year (2b) – (6b)</b>	\$ 129.0	\$ 106.0
<b>10. UAAL Gain (or Loss) (8) – (9)</b>	\$ (472.3)	\$ (424.3)



## Schedule A – Results of the Valuation

### GROUP LIFE INSURANCE PROGRAM (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
1. COVERED PAYROLL	\$ 17,813,570	\$ 17,559,285
2. ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members	\$ 1,695,520	\$ 1,672,268
(b) Present retired and disabled members	<u>1,633,937</u>	<u>1,522,758</u>
(c) Total present value of prospective benefits	\$ 3,329,457	\$ 3,195,026
(d) Present value of future normal contributions	<u>500,353</u>	<u>493,517</u>
(e) Total actuarial accrued liability (2c) – (2d)	\$ 2,829,104	\$ 2,701,509
3. PRESENT ASSETS FOR VALUATION PURPOSES	\$ 1,128,876	\$ 992,221
4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)	\$ 1,700,228	\$ 1,709,288
5. NORMAL CONTRIBUTION*	\$ 73,865	\$ 72,649
6. ACCRUED LIABILITY CONTRIBUTION	<u>95,846</u>	<u>94,904</u>
7. TOTAL CONTRIBUTION (6) + (7)	\$ 169,711	\$ 167,553
8. EFFECTIVE AMORTIZATION PERIOD	28.6	29.4
9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (5) ÷ (1)	0.42%	0.42%
10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)	<u>0.55%</u>	<u>0.55%</u>
11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)	0.97%	0.97%
12. ADJUSTMENT FOR ACTIVE GROUP LIFE INSURANCE	<u>0.34%</u>	<u>0.34%</u>
13. TOTAL ANNUAL REQUIRED CONTRIBUTION FOR PLAN (11) + (12)	1.31%	1.31%
14. DISCOUNT RATE	7.00%	7.00%

\*Includes total administrative expenses of \$183,000 for 2015.





## Schedule A – Results of the Valuation (continued)

### HEALTH INSURANCE CREDIT PROGRAM STATE EMPLOYEES (State, SPORS, JRS, VaLORS, ORP, and UVA) (\$ IN THOUSANDS)

Valuation Date		June 30, 2015	June 30, 2014
1.	<b>COVERED PAYROLL</b>	\$ 6,055,429	\$ 5,930,862
2.	<b>ACTUARIAL ACCRUED LIABILITY</b>		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members	\$ 507,694	\$ 510,144
	(b) Present retired, disabled, and deferred members	<u>594,098</u>	<u>577,291</u>
	(c) Total present value of prospective benefits	\$ 1,101,792	\$ 1,087,435
	(d) Present value of future normal contributions	<u>125,266</u>	<u>125,293</u>
	(e) Total actuarial accrued liability (2c) – (2d)	\$ 976,526	\$ 962,142
3.	<b>PRESENT ASSETS FOR VALUATION PURPOSES</b>	\$ 67,164	\$ 60,645
4.	<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)</b>	\$ 909,362	\$ 901,497
5.	<b>EFFECTIVE AMORTIZATION PERIOD</b>	28.0	29.0
6.	<b>NORMAL CONTRIBUTION*</b>	\$ 18,202	\$ 18,029
7.	<b>ACCRUED LIABILITY CONTRIBUTION</b>	<u>51,839</u>	<u>50,417</u>
8.	<b>TOTAL CONTRIBUTION BASED ON COVERED PAYROLL (6) + (7)</b>	\$ 70,041	\$ 68,446
9.	<b>NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)</b>	0.31%	0.30%
10.	<b>ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)</b>	<u>0.87%</u>	<u>0.87%</u>
11.	<b>TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)</b>	1.18%	1.17%
12.	<b>DISCOUNT RATE</b>	7.00%	7.00%

\*Includes total administrative expenses of \$195,080 for 2015.



**Schedule A – Results of the Valuation (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
TEACHERS  
(\$ IN THOUSANDS)**

Valuation Date		June 30, 2015	June 30, 2014
1.	<b>COVERED PAYROLL</b>	\$ 7,488,507	\$ 7,362,793
2.	<b>ACTUARIAL ACCRUED LIABILITY</b>		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members	\$ 691,836	\$ 688,851
	(b) Present retired, disabled, and deferred members	<u>786,781</u>	<u>761,301</u>
	(c) Total present value of prospective benefits	\$ 1,478,617	\$ 1,450,152
	(d) Present value of future normal contributions	<u>153,202</u>	<u>152,431</u>
	(e) Total actuarial accrued liability (2c) – (2d)	\$ 1,325,415	\$ 1,297,721
3.	<b>PRESENT ASSETS FOR VALUATION PURPOSES</b>	\$ 85,379	\$ 79,177
4.	<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)</b>	\$ 1,240,036	\$ 1,218,544
5.	<b>EFFECTIVE AMORTIZATION PERIOD</b>	27.8	28.8
6.	<b>NORMAL CONTRIBUTION*</b>	\$ 18,948	\$ 18,631
7.	<b>ACCRUED LIABILITY CONTRIBUTION</b>	<u>71,021</u>	<u>68,320</u>
8.	<b>TOTAL CONTRIBUTION BASED ON ACTIVE PAYROLL (6) + (7)</b>	\$ 89,969	\$ 86,951
9.	<b>NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)</b>	0.26%	0.25%
10.	<b>ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)</b>	<u>0.97%</u>	<u>0.95%</u>
11.	<b>TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)</b>	1.23%	1.20%
12.	<b>DISCOUNT RATE</b>	7.00%	7.00%

\*Includes total administrative expenses of \$210,627 for 2015.



**Schedule A – Results of the Valuation (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
PARTICIPATING POLITICAL SUBDIVISIONS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
<b>1. COVERED PAYROLL</b>	\$ 900,390	\$ 875,485
<b>2. ACTUARIAL ACCRUED LIABILITY</b>		
Present value of prospective benefits payable in respect of:		
(a) Present active members	\$ 24,151	\$ 23,896
(b) Present retired, disabled, and deferred members	<u>19,286</u>	<u>17,754</u>
(c) Total present value of prospective benefits	\$ 43,437	\$ 41,650
(d) Present value of future normal contributions	<u>6,525</u>	<u>6,453</u>
(e) Total actuarial accrued liability (2c) – (2d)	\$ 36,912	\$ 35,197
<b>3. PRESENT ASSETS FOR VALUATION PURPOSES</b>	\$ 19,348	\$ 18,605
<b>4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)</b>	\$ 17,564	\$ 16,592
<b>5. EFFECTIVE AMORTIZATION PERIOD</b>	27.8	29.2
<b>6. NORMAL CONTRIBUTION*</b>	\$ 947	\$ 869
<b>7. ACCRUED LIABILITY CONTRIBUTION</b>	<u>1,005</u>	<u>924</u>
<b>8. TOTAL CONTRIBUTION BASED ON ACTIVE PAYROLL (6) + (7)</b>	\$ 1,952	\$ 1,793
<b>9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)</b>	0.14%	0.13%
<b>10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)</b>	<u>0.17%</u>	<u>0.16%</u>
<b>11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)</b>	0.31%	0.29%
<b>12. DISCOUNT RATE</b>	7.00%	7.00%

\*Includes total administrative expenses of \$58,583 for 2015.



**Schedule A – Results of the Valuation (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
CONSTITUTIONAL OFFICERS  
(\$ IN THOUSANDS)**

Valuation Date		June 30, 2015	June 30, 2014
1.	<b>COVERED PAYROLL</b>	\$ 584,797	\$ 567,134
2.	<b>ACTUARIAL ACCRUED LIABILITY</b>		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members	\$ 17,212	\$ 16,964
	(b) Present retired, disabled, and deferred members	<u>13,802</u>	<u>13,141</u>
	(c) Total present value of prospective benefits	\$ 31,014	\$ 30,105
	(d) Present value of future normal contributions	<u>4,314</u>	<u>4,235</u>
	(e) Total actuarial accrued liability (2c) – (2d)	\$ 26,700	\$ 25,870
3.	<b>PRESENT ASSETS FOR VALUATION PURPOSES</b>	\$ 1,120	\$ 2,378
4.	<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)</b>	\$ 25,580	\$ 23,492
5.	<b>EFFECTIVE AMORTIZATION PERIOD</b>	27.6	29.4
6.	<b>NORMAL CONTRIBUTION*</b>	\$ 600	\$ 586
7.	<b>ACCRUED LIABILITY CONTRIBUTION</b>	<u>1,471</u>	<u>1,303</u>
8.	<b>TOTAL CONTRIBUTION BASED ON ACTIVE PAYROLL (6) + (7)</b>	\$ 2,071	\$ 1,889
9.	<b>NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)</b>	0.10%	0.11%
10.	<b>ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)</b>	<u>0.26%</u>	<u>0.23%</u>
11.	<b>TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)</b>	0.36%	0.34%
12.	<b>DISCOUNT RATE</b>	7.00%	7.00%

\*Includes total administrative expenses of \$0 for 2015.



**Schedule A – Results of the Valuation (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
SOCIAL SERVICE EMPLOYEES  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2015
<b>1. COVERED PAYROLL</b>	\$ 228,472	\$ 210,499
<b>2. ACTUARIAL ACCRUED LIABILITY</b>		
Present value of prospective benefits payable in respect of:		
(a) Present active members	\$ 6,724	\$ 6,718
(b) Present retired, disabled, and deferred members	<u>8,357</u>	<u>7,767</u>
(c) Total present value of prospective benefits	\$ 15,081	\$ 14,485
(d) Present value of future normal contributions	<u>1,674</u>	<u>1,538</u>
(e) Total actuarial accrued liability (2c) – (2d)	\$ 13,407	\$ 12,947
<b>3. PRESENT ASSETS FOR VALUATION PURPOSES</b>	\$ 915	\$ 1,736
<b>4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)</b>	\$ 12,492	\$ 11,211
<b>5. EFFECTIVE AMORTIZATION PERIOD</b>	27.8	30.0
<b>6. NORMAL CONTRIBUTION*</b>	\$ 235	\$ 220
<b>7. ACCRUED LIABILITY CONTRIBUTION</b>	<u>714</u>	<u>615</u>
<b>8. TOTAL CONTRIBUTION BASED ON ACTIVE PAYROLL (6) + (7)</b>	\$ 949	\$ 835
<b>9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)</b>	0.10%	0.11%
<b>10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)</b>	<u>0.32%</u>	<u>0.29%</u>
<b>11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)</b>	0.42%	0.40%
<b>12. DISCOUNT RATE</b>	7.00%	7.00%

\*Includes total administrative expenses of \$0 for 2015.



**Schedule A – Results of the Valuation (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
REGISTRARS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
<b>1. COVERED PAYROLL</b>	\$ 9,884	\$ 9,242
<b>2. ACTUARIAL ACCRUED LIABILITY</b>		
Present value of prospective benefits payable in respect of:		
(a) Present active members	\$ 291	\$ 275
(b) Present retired, disabled, and deferred members	<u>281</u>	<u>272</u>
(c) Total present value of prospective benefits	\$ 572	\$ 547
(d) Present value of future normal contributions	<u>68</u>	<u>65</u>
(e) Total actuarial accrued liability (2c) – (2d)	\$ 504	\$ 482
<b>3. PRESENT ASSETS FOR VALUATION PURPOSES</b>	\$ 7	\$ 31
<b>4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)</b>	\$ 497	\$ 451
<b>5. EFFECTIVE AMORTIZATION PERIOD</b>	27.1	29.0
<b>6. NORMAL CONTRIBUTION*</b>	\$ 11	\$ 10
<b>7. ACCRUED LIABILITY CONTRIBUTION</b>	<u>29</u>	<u>25</u>
<b>8. TOTAL CONTRIBUTION BASED ON ACTIVE PAYROLL (6) + (7)</b>	\$ 40	\$ 35
<b>9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)</b>	0.11%	0.11%
<b>10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)</b>	<u>0.30%</u>	<u>0.28%</u>
<b>11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)</b>	0.41%	0.39%
<b>12. DISCOUNT RATE</b>	7.00%	7.00%

\*Includes total administrative expenses of \$0 for 2015.



## Schedule A – Results of the Valuation (continued)

### VIRGINIA SICKNESS AND DISABILITY PROGRAM (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
1. COVERED PAYROLL*	\$ 3,627,297	\$ 3,585,486
2. ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members	\$ 264,385	\$ n/a
(b) Present retired, disabled, and deferred members	<u>156,796</u>	<u>n/a</u>
(c) Total present value of prospective benefits	\$ 421,181	\$ n/a
(d) Present value of future normal contributions	<u>185,934</u>	<u>n/a</u>
(e) Total actuarial accrued liability (2c) – (2d)	\$ 235,247	\$ 239,207
3. PRESENT ASSETS FOR VALUATION PURPOSES	\$ 398,609	\$ 376,372
4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)	\$ (163,362)	\$ (137,165)
5. EFFECTIVE AMORTIZATION PERIOD	25.9	28.4
6. NORMAL CONTRIBUTION**	\$ 33,306	\$ 34,913
7. ACCRUED LIABILITY CONTRIBUTION	<u>(9,730)</u>	<u>(7,752)</u>
8. TOTAL CONTRIBUTION BASED ON ACTIVE PAYROLL (6) + (7)	\$ 23,576	\$ 27,161
9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)	0.93%	0.99%
10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)	<u>(0.27)%</u>	<u>(0.22)%</u>
11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)	0.66%	0.77%
12. DISCOUNT RATE	7.00%	7.00%

\*Covered payroll consist of only those State, VaLORS, and SPORS employees participating in VSDP and exclude the compensation of those employees hired before January 1, 1999 who did not elect VSDP during one of two open enrollment periods offered in 1999 and 2002.

\*\*Includes third party administrator expenses of \$7,830,427 for 2014 and administrative expenses of \$8,535,828 for 2015.



## Schedule A – Results of the Valuation (continued)

### VIRGINIA LOCAL DISABILITY PROGRAM TEACHERS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
1. COVERED PAYROLL*	\$ 104,087	\$ 9,247
2. ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members:	\$ 1,921	\$ n/a
(b) Present disabled members:	15	n/a
(c) Total present value of prospective benefits	\$ 1,936	\$ n/a
(d) Present value of future normal contributions	1,759	n/a
(e) Total actuarial accrued liability (2c) – (2d)	\$ 177	\$ 11
3. PRESENT ASSETS FOR VALUATION PURPOSES	\$ 48	\$ 0
4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)	\$ 129	\$ 11
5. AMORTIZATION PERIOD	20.1	13.9
6. NORMAL CONTRIBUTION**	\$ 303	\$ 27
7. ACCRUED LIABILITY CONTRIBUTION	9	1
8. TOTAL CONTRIBUTION BASED ON COVERED PAYROLL (6) + (7)	\$ 312	\$ 28
9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)	0.30%	0.30%
10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)	0.01%	0.00%
11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)	0.31%	0.30%
12. DISCOUNT RATE	7.00%	7.00%

\*Covered payroll consist of only those Teachers employees participating in VLDP

\*\*Includes estimated third party administrator expenses of \$3,699 for 2014 and total administrative expenses of 122,551 for 2015.





## Schedule A – Results of the Valuation (continued)

### VIRGINIA LOCAL DISABILITY PROGRAM POLITICAL SUBDIVISIONS (\$ IN THOUSANDS)

Valuation Date	June 30, 2015	June 30, 2014
1. COVERED PAYROLL*	\$ 88,350	\$ 24,688
2. ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members:	\$ 2,783	\$ n/a
(b) Present disabled members:	30	n/a
(c) Total present value of prospective benefits	\$ 2,813	\$ n/a
(d) Present value of future normal contributions	2,677	n/a
(e) Total actuarial accrued liability (2c) – (2d)	\$ 136	\$ 48
3. PRESENT ASSETS FOR VALUATION PURPOSES	\$ 30	\$ 0
4. UNFUNDED ACTUARIAL ACCRUED LIABILITY (2e) – (3)	\$ 106	\$ 48
5. AMORTIZATION PERIOD	17.9	23.9
6. NORMAL CONTRIBUTION**	\$ 515	\$ 143
7. ACCRUED LIABILITY CONTRIBUTION	8	3
8. TOTAL CONTRIBUTION BASED ON COVERED PAYROLL (6) + (7)	\$ 523	\$ 146
9. NORMAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (6) ÷ (1)	0.59%	0.59%
10. ACCRUED LIABILITY CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (7) ÷ (1)	0.01%	0.00%
11. TOTAL CONTRIBUTION AS A PERCENT OF COVERED PAYROLL (9) + (10)	0.60%	0.59%
12. DISCOUNT RATE	7.00%	7.00%

\*Covered payroll consist of only those Political Subdivisions employees participating in VLDP

\*\*Includes estimated third party administrator expenses of \$34,564 for 2014 and total administrative expenses of \$156,034 for 2015.



## Schedule A – Solvency Test

### GROUP LIFE INSURANCE PROGRAM (\$ 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)
6/30/2015	n/a	\$1,633,937	\$1,195,167	\$2,829,104	\$1,128,876	n/a	69.09%	0.00%
6/30/2014	n/a	1,522,758	1,178,751	2,701,509	992,221	n/a	65.16	0.00
6/30/2013	n/a	1,422,423	1,149,268	2,571,691	836,547	n/a	58.81	0.00
6/30/2012	n/a	1,308,096	1,150,214	2,458,310	755,889	n/a	57.79	0.00
6/30/2011	n/a	1,228,335	1,130,642	2,358,977	852,424	n/a	69.40	0.00
6/30/2010	n/a	1,140,158	1,105,157	2,245,315	928,920	n/a	81.47	0.00

### HEALTH INSURANCE CREDIT PROGRAM (\$ 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)
STATE EMPLOYEES								
6/30/2015	n/a	\$594,098	\$382,428	\$976,526	\$ 67,164	n/a	11.31%	0.00%
6/30/2014	n/a	577,291	384,851	962,142	60,645	n/a	10.51	0.00
6/30/2013	n/a	562,448	382,134	944,582	54,773	n/a	9.74	0.00
6/30/2012	n/a	542,874	374,294	917,168	55,510	n/a	10.23	0.00
6/30/2011	n/a	530,461	366,099	896,560	110,791	n/a	20.89	0.00
6/30/2010	n/a	521,153	373,888	895,041	159,163	n/a	30.54	0.00
TEACHERS								
6/30/2015	n/a	\$786,781	\$538,634	\$1,325,415	\$ 85,379	n/a	10.85%	0.00%
6/30/2014	n/a	761,301	536,420	1,297,721	79,177	n/a	10.40	0.00
6/30/2013	n/a	728,612	529,180	1,257,792	67,012	n/a	9.20	0.00
6/30/2012	n/a	732,146	536,924	1,269,070	58,286	n/a	7.96	0.00
6/30/2011	n/a	707,436	522,769	1,230,205	85,933	n/a	12.15	0.00
6/30/2010	n/a	666,263	536,175	1,202,438	108,187	n/a	16.24	0.00



**Schedule A – Solvency Test (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
(\$ 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)
PARTICIPATING POLITICAL SUBDIVISIONS								
6/30/2015	n/a	\$19,286	\$17,626	\$36,912	\$19,348	n/a	100.00%	0.35%
6/30/2014	n/a	17,371	17,826	35,197	18,605	n/a	100.00	6.92%
6/30/2013	n/a	16,268	17,036	33,304	16,137	n/a	99.19	0.00%
6/30/2012	n/a	15,054	16,369	31,423	14,275	n/a	94.83	0.00%
6/30/2011	n/a	14,503	15,688	30,191	13,918	n/a	95.97	0.00%
6/30/2010	n/a	13,223	16,861	30,084	11,218	n/a	84.84	0.00%
CONSTITUTIONAL OFFICERS								
6/30/2015	n/a	\$13,802	\$12,898	\$26,700	\$ 1,120	n/a	8.11%	0.00%
6/30/2014	n/a	13,140	12,730	25,870	2,378	n/a	18.10	0.00
6/30/2013	n/a	12,413	12,357	24,770	831	n/a	6.69	0.00
6/30/2012	n/a	12,420	12,693	25,113	1,338	n/a	10.77	0.00
6/30/2011	n/a	11,402	12,612	24,014	1,652	n/a	14.49	0.00
6/30/2010	n/a	10,819	11,884	22,703	1,898	n/a	17.54	0.00
SOCIAL SERVICE EMPLOYEES								
6/30/2015	n/a	\$ 8,357	\$ 5,051	\$13,408	\$ 915	n/a	10.95%	0.00%
6/30/2014	n/a	7,767	5,180	12,947	1,736	n/a	22.35	0.00
6/30/2013	n/a	7,349	5,232	12,581	681	n/a	9.27	0.00
6/30/2012	n/a	7,161	5,538	12,699	532	n/a	7.43	0.00
6/30/2011	n/a	6,714	5,548	12,262	731	n/a	10.89	0.00
6/30/2010	n/a	6,094	5,602	11,696	876	n/a	14.37	0.00
REGISTRARS								
6/30/2015	n/a	\$ 281	\$ 223	\$ 504	\$ 7	n/a	2.49%	0.00%
6/30/2014	n/a	272	210	482	31	n/a	11.40	0.00
6/30/2013	n/a	239	205	444	(2)	n/a	(0.84)	0.00
6/30/2012	n/a	237	225	462	(63)	n/a	(26.58)	0.00
6/30/2011	n/a	155	246	401	(45)	n/a	(29.03)	0.00
6/30/2010	n/a	131	238	369	(31)	n/a	(23.66)	0.00



## Schedule A – Solvency Test (continued)

### VIRGINIA SICKNESS AND DISABILITY PROGRAM (\$ 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)
6/30/2015*	n/a	\$156,796	\$ 78,451	\$235,247	\$398,609	n/a	100.00%	308.23%
6/30/2014	n/a	138,511	50,027	188,538	325,354	n/a	100.00	373.48
6/30/2013	n/a	132,842	50,104	182,946	313,480	n/a	100.00	360.53
6/30/2012	n/a	125,578	136,151	261,729	305,170	n/a	100.00	131.91
6/30/2011	n/a	123,339	139,505	262,844	330,079	n/a	100.00	148.20
6/30/2010	n/a	133,728	148,251	281,979	302,683	n/a	100.00	113.97

\* Includes Long-Term Care. Values prior to 6/30/2015 reflect Long-Term Disability only.

### VIRGINIA LOCAL DISABILITY PROGRAM (\$ 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)
	<u>TEACHERS</u>							
6/30/2015*	n/a	\$15	\$162	\$177	\$48	n/a	100.00%	20.37%
6/30/2014	n/a	n/a	n/a	11	0	n/a	0.00%	0.00%
<u>POLITICAL SUBDIVISIONS</u>								
6/30/2015*	n/a	\$30	\$106	\$136	\$30	n/a	100.00%	0.00%
6/30/2014	n/a	n/a	n/a	48	0	n/a	0.00%	0.00%

\* Includes Long-Term Care. Values prior to 6/30/2015 reflect Long-Term Disability only.



## ***Schedule B – Plan Assets***

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GASB 43 and 45 define plan assets as resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employers or plan administrator, for the payment of benefits in accordance with the terms of the plan.

For HIC – Participating Political Subdivisions, HIC – Constitutional Officers, HIC – Social Service Employees, and HIC – Registrars, the actuarial value of assets equals the market value of assets. For all other OPEB Plans, the actuarial value of assets is a smoothed market value, phasing-in investment returns above or below the 7.00% assumption over five years. This smoothed value is subject to a corridor that restricts the actuarial value of assets from being more than 120% or less than 80% of the market value of assets. The actuarial value of assets used for the valuation are shown on the following pages.



**Schedule B – Plan Assets (continued)**

**GROUP LIFE INSURANCE PROGRAM  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 1,079,315	\$ 887,773
Revenue for the year		
Contributions		
Member	\$ 124,374	\$ 122,678
Employer	<u>84,089</u>	<u>82,908</u>
Total contributions	\$ 208,463	\$ 205,586
Net investment income	\$ 52,175	\$ 146,865
Miscellaneous revenue	<u>0</u>	<u>0</u>
2. Total revenue	\$ 260,638	\$ 352,451
Expenditures for the year		
Benefit payments	\$ 175,760	\$ 159,358
Administrative expenses	183	275
Other expenses	<u>1,393</u>	<u>1,276</u>
3. Total expenditures	\$ 177,336	\$ 160,909
4. Change in net assets (2) – (3)	\$ 83,302	\$ 191,542
5. Market value of assets at end of year (1) + (4)	\$ 1,162,617	\$ 1,079,315



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
STATE EMPLOYEES  
(State, SPORS, JRS, VaLORS, ORP, and UVA)  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 65,201	\$ 59,879
Revenue for the year		
Contributions	\$ 63,907	\$ 59,438
Net investment income	<u>2,874</u>	<u>8,445</u>
2. Total revenue	\$ 66,781	\$ 67,883
Expenditures for the year		
Benefit payments	\$ 64,354	\$ 62,349
Administrative expenses	<u>195</u>	<u>212</u>
3. Total expenditures	\$ 64,549	\$ 62,561
4. Change in net assets (2) – (3)	\$ 2,232	\$ 5,322
5. Market value of assets at end of year (1) + (4)	\$ 67,433	\$ 65,201



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
TEACHERS  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 82,108	\$ 68,956
Revenue for the year		
Contributions	\$ 78,874	\$ 80,719
Net investment income	<u>3,070</u>	<u>9,073</u>
2. Total revenue	\$ 81,944	\$ 89,792
Expenditures for the year		
Benefit payments	\$ 79,457	\$ 76,389
Administrative expenses	<u>211</u>	<u>251</u>
3. Total expenditures	\$ 79,668	\$ 76,640
4. Change in net assets (2) – (3)	\$ 2,276	\$ 13,152
5. Market value of assets at end of year (1) + (4)	\$ 84,384	\$ 82,108





**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
PARTICIPATING POLITICAL SUBDIVISIONS  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

<b>Valuation Date</b>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
1. Market value of assets at beginning of year	\$ 18,605	\$ 16,137
Revenue for the year		
Contributions	\$ 1,933	\$ 1,876
Net investment income	<u>823</u>	<u>2,445</u>
2. Total revenue	\$ 2,756	\$ 4,321
Expenditures for the year		
Benefit payments	\$ 1,954	\$ 1,796
Administrative expenses	<u>59</u>	<u>57</u>
3. Total expenditures	\$ 2,013	\$ 1,853
4. Change in net assets (2) – (3)	\$ 743	\$ 2,468
5. Market value of assets at end of year (1) + (4)	\$ 19,348	\$ 18,605



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
CONSTITUTIONAL OFFICERS  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at end of prior year	\$ 2,378	\$ 831
2. Adjustment to market value of assets	\$ (2,028)	\$ 0
3. Market value of assets at beginning of year	\$ 350	\$ 831
Revenue for the year		
Contributions	\$ 2,140	\$ 2,834
Net investment income	<u>0</u>	<u>0</u>
4. Total revenue	\$ 2,140	\$ 2,834
Expenditures for the year		
Benefit payments	\$ 1,370	\$ 1,287
Administrative expenses	<u>0</u>	<u>0</u>
5. Total expenditures	\$ 1,370	\$ 1,287
6. Change in net assets (2) – (3)	\$ 770	\$ 1,547
7. Market value of assets at end of year (1) + (4)	\$ 1,120	\$ 2,378



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
SOCIAL SERVICE EMPLOYEES  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 1,736	\$ 681
2. Adjustment to market value of assets	\$ (956)	\$ 0
3. Market value of assets at beginning of year	\$ 780	\$ 681
Revenue for the year		
Contributions	\$ 963	\$ 1,817
Net investment income	<u>0</u>	<u>0</u>
4. Total revenue	\$ 963	\$ 1,817
Expenditures for the year		
Benefit payments	\$ 828	\$ 762
Administrative expenses	<u>0</u>	<u>0</u>
5. Total expenditures	\$ 828	\$ 762
6. Change in net assets (2) – (3)	\$ 135	\$ 1,055
7. Market value of assets at end of year (1) + (4)	\$ 915	\$ 1,736



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
REGISTRARS  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 31	\$ (2)
2. Adjustment to market value of assets	\$ (38)	\$ 0
3. Market value of assets at beginning of year	\$ (7)	\$ (2)
Revenue for the year		
Contributions	\$ 38	\$ 57
Net investment income	<u>0</u>	<u>0</u>
4. Total revenue	\$ 38	\$ 57
Expenditures for the year		
Benefit payments	\$ 24	\$ 24
Administrative expenses	<u>0</u>	<u>0</u>
5. Total expenditures	\$ 24	\$ 24
6. Change in net assets (2) – (3)	\$ 14	\$ 33
7. Market value of assets at end of year (1) + (4)	\$ 7	\$ 31



**Schedule B – Plan Assets (continued)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

<b>Valuation Date – June 30, 2015</b>	<b>LTD</b>	<b>LTC</b>	<b>TOTAL</b>
1. Market value of assets at beginning of year	\$ 355,231	\$ 54,867	\$ 410,098
Revenue for the Year			
Contributions and miscellaneous revenue	\$ 19,458	\$ 4,568	\$ 24,026
Net investment income	<u>15,884</u>	<u>2,454</u>	<u>18,338</u>
2. Total revenue	\$ 35,342	\$ 7,022	\$ 42,364
Expenditures for the year			
Benefit payments	\$ 28,504	\$ 159	\$ 28,663
Administrative expenses	<u>8,696</u>	<u>585</u>	<u>9,281</u>
3. Total expenditures	\$ 37,200	\$ 744	\$ 37,944
4. Change in net assets (2) – (3)	\$ (1,858)	\$ 6,278	\$ 4,420
5. Market value of assets at end of year (1) + (4)	\$ 353,373	\$ 61,145	\$ 414,518

<b>Valuation Date – June 30, 2014</b>	<b>LTD</b>	<b>LTC</b>	<b>TOTAL</b>
1. Market value of assets at beginning of year	\$ 324,510	\$ 45,611	\$ 370,121
Revenue for the Year			
Contributions and miscellaneous revenue	\$ 14,393	\$ 3,300	\$ 17,693
Net investment income	<u>49,604</u>	<u>6,970</u>	<u>56,574</u>
2. Total revenue	\$ 63,997	\$ 10,270	\$ 74,267
Expenditures for the year			
Benefit payments	\$ 24,920	\$ 931	\$ 25,851
Administrative expenses	<u>8,356</u>	<u>83</u>	<u>8,439</u>
3. Total expenditures	\$ 33,276	\$ 1,014	\$ 34,290
4. Change in net assets (2) – (3)	\$ 30,721	\$ 9,256	\$ 39,977
5. Market value of assets at end of year (1) + (4)	\$ 355,231	\$ 54,867	\$ 410,098



**Schedule B – Plan Assets (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
TEACHERS  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

Valuation Date – June 30, 2015	LTD	LTC	TOTAL
1. Market value of assets at beginning of year	\$ 0	\$ 0	\$ 0
Revenue for the Year			
Contributions and miscellaneous revenue	\$ 193	\$ 177	\$ 370
Net investment income	<u>0</u>	<u>0</u>	<u>0</u>
2. Total revenue	\$ 193	\$ 177	\$ 370
Expenditures for the year			
Benefit payments	\$ 0	\$ 0	\$ 0
Administrative expenses	<u>314</u>	<u>56</u>	<u>370</u>
3. Total expenditures	\$ 314	\$ 56	\$ 370
4. Change in net assets (2) – (3)	\$ (121)	\$ 121	\$ 0
5. Market value of assets at end of year (1) + (4)	\$ (121)	\$ 121	\$ 0



**Schedule B – Plan Assets (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
POLITICAL SUBDIVISIONS  
RECONCILIATION OF ASSETS  
(\$ IN THOUSANDS)**

<b>Valuation Date – June 30, 2015</b>	<b>LTD</b>	<b>LTC</b>	<b>TOTAL</b>
1. Market value of assets at beginning of year	\$ 0	\$ 0	\$ 0
Revenue for the Year			
Contributions and miscellaneous revenue	\$ 324	\$ 181	\$ 505
Net investment income	<u>0</u>	<u>(1)</u>	<u>(1)</u>
2. Total revenue	\$ 324	\$ 180	\$ 504
Expenditures for the year			
Benefit payments	\$ 0	\$ 0	\$ 0
Administrative expenses	<u>399</u>	<u>105</u>	<u>504</u>
3. Total expenditures	\$ 399	\$ 105	\$ 504
4. Change in net assets (2) – (3)	\$ (75)	\$ 75	\$ 0
5. Market value of assets at end of year (1) + (4)	\$ (75)	\$ 75	\$ 0



**Schedule B – Plan Assets (continued)**

**GROUP LIFE INSURANCE PROGRAM  
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
PREPARED AS OF JUNE 30, 2015  
(\$ IN THOUSANDS)**

Valuation Date	6/30/2015
1. Excess (Shortfall) of invested income for current and previous three years	
a. Current Year	\$ (24,656)
b. First Prior Year	81,552
c. Second Prior Year	34,863
d. Third Prior Year	<u>(47,050)</u>
e. Total for four years	\$ 44,709
2. Deferral of excess (shortfall) of investment income	
a. Current Year at 80%: (1a) x 0.80	\$ (19,725)
b. First Prior Year at 60%: (1b) x 0.60	48,931
c. Second Prior Year at 40%: (1c) x 0.40	13,945
d. Third Prior Year at 20%: (1d) x 0.20	<u>(9,410)</u>
e. Total for four years	\$ 33,741
3. Market value of assets at end of year	\$ 1,162,617
4. Preliminary actuarial value of assets at end of year: (3) – (2e)	\$ 1,128,876
5. Actuarial value of assets corridor	
a. 80% of market value at end of year: (3) x 0.80	\$ 930,094
b. 120% of market value at end of year: (3) x 1.20	\$ 1,395,140
6. Actuarial value of assets at end of year	\$ 1,128,876





**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
PREPARED AS OF JUNE 30, 2015  
(\$ IN THOUSANDS)**

Group	State Employees*	Teachers
1. Excess (Shortfall) of invested income for current and previous three years		
a. Current year	\$ (1,868)	\$ (2,868)
b. First Prior Year	4,143	3,843
c. Second Prior Year	1,687	351
d. Third Prior Year	<u>(6,988)</u>	<u>(5,734)</u>
e. Total for four years	\$ (3,026)	\$ (4,408)
2. Deferral of excess (shortfall) of investment income		
a. Current Year at 80%: (1a) x 0.80	\$ (1,494)	\$ (2,294)
b. First Prior Year at 60%: (1b) x 0.60	2,486	2,306
c. Second Prior Year at 40%: (1c) x 0.40	675	140
d. Third Prior Year at 20%: (1d) x 0.20	<u>(1,398)</u>	<u>(1,147)</u>
e. Total for four years	\$ 269	\$ (995)
3. Market value of assets at end of year	\$ 67,433	\$ 84,384
4. Preliminary actuarial value of assets at end of year: (3) – (2e)	\$ 67,164	\$ 85,379
5. Actuarial value of assets corridor		
a. 80% of market value at end of year: (3) x 0.80	\$ 53,946	\$ 67,507
b. 120% of market value at end of year: (3) x 1.20	80,920	101,261
6. Actuarial value of assets at end of year	\$ 67,164	\$ 85,379

\*Includes State, SPORS, JRS, VaLORS, ORP, and UVA.



**Schedule B – Plan Assets (continued)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM  
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
PREPARED AS OF JUNE 30, 2015  
(\$ IN THOUSANDS)**

Benefit	LTD	LTC
1. Excess (Shortfall) of invested income for current and previous three years		
a. Current year	\$ (9,131)	\$ (1,640)
b. First Prior Year	27,006	3,611
c. Second Prior Year	13,787	1,601
d. Third Prior Year	<u>0</u>	<u>0</u>
e. Total for four years	\$ 31,662	\$ 3,572
2. Deferral of excess (shortfall) of investment income		
a. Current Year at 80%: (1a) x 0.80	\$ (7,305)	\$ (1,312)
b. First Prior Year at 60%: (1b) x 0.60	16,204	2,167
c. Second Prior Year at 40%: (1c) x 0.40	5,515	640
d. Third Prior Year at 20%: (1d) x 0.20	<u>0</u>	<u>0</u>
e. Total for four years	\$ 14,414	\$ 1,495
3. Market value of assets at end of year	\$ 353,373	\$ 61,145
4. Preliminary actuarial value of assets at end of year: (3) – (2e)	\$ 338,959	\$ 59,650
5. Actuarial value of assets corridor		
a. 80% of market value at end of year: (3) x 0.80	\$ 282,698	\$ 48,916
b. 120% of market value at end of year: (3) x 1.20	424,048	73,374
6. Actuarial value of assets at end of year	\$ 338,959	\$ 59,650



**Schedule B – Plan Assets (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
TEACHERS  
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
PREPARED AS OF JUNE 30, 2015  
(\$ IN THOUSANDS)**

Benefit	LTD	LTC
1. Excess (Shortfall) of invested income for current and previous three years		
a. Current year	\$ (38)	\$ (56)
b. First Prior Year	0	0
c. Second Prior Year	0	0
d. Third Prior Year	0	0
e. Total for four years	\$ (38)	\$ (56)
2. Deferral of excess (shortfall) of investment income		
a. Current Year at 80%: (1a) x 0.80	\$ (30)	\$ (45)
b. First Prior Year at 60%: (1b) x 0.60	0	0
c. Second Prior Year at 40%: (1c) x 0.40	0	0
d. Third Prior Year at 20%: (1d) x 0.20	0	0
e. Total for four years	\$ (30)	\$ (45)
3. Market value of assets at end of year	\$ (121)	\$ 121
4. Preliminary actuarial value of assets at end of year: (3) – (2e)	\$ (91)	\$ 166
5. Actuarial value of assets corridor		
a. 80% of market value at end of year: (3) x 0.80	\$ (97)	\$ 97
b. 120% of market value at end of year: (3) x 1.20	(145)	145
6. Actuarial value of assets at end of year	\$ (97)	\$ 145



**Schedule B – Plan Assets (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
POLITICAL SUBDIVISIONS  
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
PREPARED AS OF JUNE 30, 2015  
(\$ IN THOUSANDS)**

Benefit	LTD	LTC
1. Excess (Shortfall) of invested income for current and previous three years		
f. Current year	\$ (25)	\$ (103)
g. First Prior Year	0	0
h. Second Prior Year	0	0
i. Third Prior Year	0	0
j. Total for four years	\$ (25)	\$ (103)
2. Deferral of excess (shortfall) of investment income		
f. Current Year at 80%: (1a) x 0.80	\$ (20)	\$ (82)
g. First Prior Year at 60%: (1b) x 0.60	0	0
h. Second Prior Year at 40%: (1c) x 0.40	0	0
i. Third Prior Year at 20%: (1d) x 0.20	0	0
j. Total for four years	\$ (20)	\$ (82)
3. Market value of assets at end of year	\$ (75)	\$ 75
4. Preliminary actuarial value of assets at end of year: (3) – (2e)	\$ (55)	\$ 157
5. Actuarial value of assets corridor		
c. 80% of market value at end of year: (3) x 0.80	\$ (60)	\$ 60
d. 120% of market value at end of year: (3) x 1.20	(90)	90
6. Actuarial value of assets at end of year	\$ (60)	\$ 90



**Schedule B – Plan Assets (continued)**

**GROUP LIFE INSURANCE PROGRAM  
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 1,079,315	\$ 887,773
2. Net external cash flow during the year	\$ 31,310	\$ 46,228
3. Market value of assets at end of year	\$ 1,162,617	\$ 1,079,315
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ 51,992	\$ 145,314
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
a. Market value of assets at beginning of year: (1) x (5)	\$ 75,552	\$ 62,144
b. Net external cash flow: (2) x (5) x 0.50	<u>1,096</u>	<u>1,618</u>
c. Total: (6a) + (6b)	\$ 76,648	\$ 63,762
7. Excess investment income for the year: (4) – (6c)	\$ (24,656)	\$ 81,552



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
STATE EMPLOYEES  
(State, SPORS, JRS, VaLORS, ORP, and UVA)  
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 65,201	\$ 59,879
2. Net external cash flow during the year	\$ (447)	\$ (2,911)
3. Market value of assets at end of year	\$ 67,433	\$ 65,201
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ 2,680	\$ 8,233
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
d. Market value of assets at beginning of year: (1) x (5)	\$ 4,564	\$ 4,192
e. Net external cash flow: (2) x (5) x 0.50	<u>(16)</u>	<u>(102)</u>
f. Total: (6a) + (6b)	\$ 4,548	\$ 4,090
7. Excess investment income for the year: (4) – (6c)	\$ (1,868)	\$ 4,143



**Schedule B – Plan Assets (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
TEACHERS  
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME  
(\$ IN THOUSANDS)**

Valuation Date	June 30, 2015	June 30, 2014
1. Market value of assets at beginning of year	\$ 82,108	\$ 68,956
2. Net external cash flow during the year	\$ (583)	\$ 4,330
3. Market value of assets at end of year	\$ 84,384	\$ 82,108
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ 2,859	\$ 8,822
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
g. Market value of assets at beginning of year: (1) x (5)	\$ 5,747	\$ 4,827
h. Net external cash flow: (2) x (5) x 0.50	<u>(20)</u>	<u>152</u>
i. Total: (6a) + (6b)	\$ 5,727	\$ 4,979
7. Excess investment income for the year: (4) – (6c)	\$ (2,868)	\$ 3,843



**Schedule B – Plan Assets (continued)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM  
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME  
(\$ IN THOUSANDS)**

June 30, 2015	LTD	LTC
1. Market value of assets at beginning of year	\$ 355,231	\$ 54,867
2. Net external cash flow during the year	\$ (17,000)	\$ 3,939
3. Market value of assets at end of year	\$ 353,373	\$ 61,145
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ 15,142	\$ 2,339
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
j. Market value of assets at beginning of year: (1) x (5)	\$ 24,867	\$ 3,841
k. Net external cash flow: (2) x (5) x 0.50	<u>(594)</u>	<u>138</u>
l. Total: (6a) + (6b)	\$ 24,273	\$ 3,979
7. Excess investment income for the year: (4) – (6c)	\$ (9,139)	\$ (1,640)

June 30, 2014	LTD	LTC
1. Market value of assets at beginning of year	\$ 324,510	\$ 45,611
2. Net external cash flow during the year	\$ (18,358)	\$ 2,369
3. Market value of assets at end of year	\$ 355,231	\$ 54,867
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ 49,079	\$ 6,887
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
m. Market value of assets at beginning of year: (1) x (5)	\$ 22,716	\$ 3,193
n. Net external cash flow: (2) x (5) x 0.50	<u>(643)</u>	<u>83</u>
o. Total: (6a) + (6b)	\$ 22,073	\$ 3,276
7. Excess investment income for the year: (4) – (6c)	\$ 27,006	\$ 3,611





**Schedule B – Plan Assets (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
TEACHERS  
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME  
(\$ IN THOUSANDS)**

Benefit	LTD	LTC
1. Market value of assets at beginning of year	\$ 0	\$ 0
2. Net external cash flow during the year	\$ (80)	\$ 171
3. Market value of assets at end of year	\$ (121)	\$ 121
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ (41)	\$ (50)
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
p. Market value of assets at beginning of year: (1) x (5)	\$ 0	\$ 0
q. Net external cash flow: (2) x (5) x 0.50	<u>(3)</u>	<u>6</u>
r. Total: (6a) + (6b)	\$ (3)	\$ 6
7. Excess investment income for the year: (4) – (6c)	\$ (38)	\$ (56)



**Schedule B – Plan Assets (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
POLITICAL SUBDIVISIONS  
CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME  
(\$ IN THOUSANDS)**

<b>Benefit</b>	<b>LTD</b>	<b>LTC</b>
1. Market value of assets at beginning of year	\$ 0	\$ 0
2. Net external cash flow during the year	\$ (48)	\$ 172
3. Market value of assets at end of year	\$ (75)	\$ 75
4. Actual investment income during the year based on market value: (3) – (2) – (1)	\$ (27)	\$ (97)
5. Assumed earning rate	7.00%	7.00%
6. Expected earnings for the year		
s. Market value of assets at beginning of year: (1) x (5)	\$ 0	\$ 0
t. Net external cash flow: (2) x (5) x 0.50	<u>(2)</u>	<u>6</u>
u. Total: (6a) + (6b)	\$ (2)	\$ 6
7. Excess investment income for the year: (4) – (6c)	\$ (25)	\$ (103)



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule**

**GROUP LIFE INSURANCE PROGRAM  
UAAL AMORTIZATION SCHEDULE  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$1,735,144	\$1,754,707	\$98,088	\$1,772,583	\$101,030	28 Years
June 30, 2014 Experience (Gain)/Loss	(45,419)	(45,419)	(3,184)	(45,192)	(3,280)	19 Years
June 30, 2015 Experience (Gain)/Loss	(27,163)	n/a	n/a	(27,163)	(1,904)	20 Years
<b>Total</b>		<b>\$1,709,288</b>	<b>\$94,904</b>	<b>\$1,700,228</b>	<b>\$95,846</b>	

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$1,700,228
June 30, 2016	1,716,688
June 30, 2017	1,731,224
June 30, 2018	1,743,608
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
STATE EMPLOYEES  
UAAL AMORTIZATION SCHEDULE  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$889,809	\$899,841	\$50,301	\$909,008	\$51,810	28 Years
June 30, 2014 Experience (Gain)/Loss	1,656	1,656	116	1,648	120	19 Years
June 30, 2015 Experience (Gain)/Loss	(1,294)	n/a	n/a	(1,294)	(91)	20 Years
<b>Total</b>	<b>\$890,171</b>	<b>\$901,497</b>	<b>\$50,417</b>	<b>\$909,362</b>	<b>\$51,839</b>	

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$909,362
June 30, 2016	917,550
June 30, 2017	924,647
June 30, 2018	930,528
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
TEACHERS  
UAAL AMORTIZATION SCHEDULE  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$1,190,780	\$1,204,206	\$67,315	\$1,216,474	\$69,334	28 Years
June 30, 2014 Experience (Gain)/Loss	14,338	14,338	1,005	14,266	1,035	19 Years
June 30, 2015 Experience (Gain)/Loss	9,296	n/a	n/a	9,296	652	20 Years
<b>Total</b>		<b>\$1,218,544</b>	<b>\$68,320</b>	<b>\$1,240,036</b>	<b>\$71,021</b>	

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$1,240,036
June 30, 2016	1,250,846
June 30, 2017	1,260,133
June 30, 2018	1,267,722
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
CONSTITUTIONAL OFFICERS  
UAAL AMORTIZATION SCHEDULE  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$23,939	\$24,209	\$1,353	\$24,456	\$1,394	28 Years
June 30, 2014 Experience (Gain)/Loss	(716)	(716)	(50)	(713)	(52)	19 Years
June 30, 2015 Experience (Gain)/Loss	1,837	n/a	n/a	1,837	129	20 Years
<b>Total</b>		<b>\$23,493</b>	<b>\$1,303</b>	<b>\$25,580</b>	<b>\$1,471</b>	

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$25,580
June 30, 2016	25,796
June 30, 2017	25,981
June 30, 2018	26,130
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
SOCIAL SERVICE EMPLOYEES  
UAAL AMORTIZATION SCHEDULE  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$11,900	\$12,035	\$673	\$12,157	\$693	28 Years
June 30, 2014 Experience (Gain)/Loss	(824)	(824)	(58)	(820)	(60)	19 Years
June 30, 2015 Experience (Gain)/Loss	1,155	n/a	n/a	1,155	81	20 Years
<b>Total</b>		<b>\$11,211</b>	<b>\$615</b>	<b>\$12,492</b>	<b>\$714</b>	

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$12,492
June 30, 2016	12,572
June 30, 2017	12,632
June 30, 2018	12,673
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
REGISTRARS  
UAAL AMORTIZATION SCHEDULE  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$447	\$452	\$25	\$456	\$26	28 Years
June 30, 2014 Experience (Gain)/Loss	(1)	(1)	(0)	(1)	(0)	19 Years
June 30, 2015 Experience (Gain)/Loss	41	n/a	n/a	41	3	20 Years
<b>Total</b>		<b>\$451</b>	<b>\$25</b>	<b>\$497</b>	<b>\$29</b>	

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$497
June 30, 2016	501
June 30, 2017	504
June 30, 2018	506
June 30, 2043	0





**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM  
UAAL AMORTIZATION SCHEDULE\*  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	(\$130,534)	(\$132,006)	(\$7,379)	(\$132,519)	(\$7,554)	28 Years
June 30, 2014 Experience (Gain)/Loss	(4,810)	(4,810)	(337)	(6,004)	(435)	19 Years
June 30, 2015 Experience (Gain)/Loss	(24,839)	n/a	n/a	(24,839)	(1,741)	20 Years
<b>Total</b>		<b>(\$136,816)</b>	<b>(\$7,716)</b>	<b>(\$163,362)</b>	<b>(\$9,730)</b>	

\*Prior to 2015 the amortization balances and payments only include LTD amounts.

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	(\$163,362)
June 30, 2016	(164,386)
June 30, 2017	(165,170)
June 30, 2018	(165,686)
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
TEACHERS  
UAAL AMORTIZATION SCHEDULE\*  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$0	\$0	\$0	\$0	\$0	28 Years
June 30, 2014 Experience (Gain)/Loss	11	11	1	11	1	19 Years
June 30, 2015 Experience (Gain)/Loss	118	n/a	n/a	118	8	20 Years
<b>Total</b>		<b>\$11</b>	<b>\$1</b>	<b>\$129</b>	<b>\$9</b>	

\*Revised to include LTC amounts.

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$129
June 30, 2016	128
June 30, 2017	127
June 30, 2018	126
June 30, 2043	0



**Schedule C – Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
POLITICAL SUBDIVISIONS  
UAAL AMORTIZATION SCHEDULE\*  
(\$ in Thousands)**

<b>Description</b>	<b>Original Balance</b>	<b>Outstanding Balance as of June 30, 2014</b>	<b>July 1, 2014 Amortization Payment</b>	<b>Outstanding Balance as of June 30, 2015</b>	<b>July 1, 2015 Amortization Payment</b>	<b>Amortization Period as of June 30, 2015</b>
June 30, 2013 Legacy UAAL	\$0	\$0	\$0	\$0	\$0	28 Years
June 30, 2014 Experience (Gain)/Loss	48	48	3	48	4	19 Years
June 30, 2015 Experience (Gain)/Loss	58	n/a	n/a	58	4	20 Years
<b>Total</b>		\$48	\$3	\$106	\$8	

\*Revised to include LTC amounts.

<b>Date</b>	<b>Projected UAAL (\$ in Thousands)</b>
June 30, 2015	\$106
June 30, 2016	106
June 30, 2017	105
June 30, 2018	103
June 30, 2043	0



## ***Schedule D – Outline of Actuarial Assumptions and Methods***

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### **Assumptions and Methods Applicable to all OPEB Plans**

<b>Investment Return Rate:</b>	7.00% per annum, compounded annually.
<b>Inflation Assumption:</b>	2.50% per year.
<b>Funding Period:</b>	The amortization period of the legacy UAAL began at 30 years on June 30, 2013 and this amortization period is to decrease by one year on each subsequent valuation date until the legacy UAAL is fully amortized (amortization period of 0 years). With each subsequent valuation, a new amortization base will be used to amortize that portion of the UAAL not covered by the current balances of the previously established amortization bases. Here, each valuation's newly allocated share of the UAAL will be amortized over a closed 20-year period. In the event this funding policy produces an effective amortization period of greater than 30 years, a 30 year amortization period for the aggregate UAAL is used in accordance with GASB 43 and 45.
<b>Payroll Growth Rate:</b>	3.00% per annum.
<b>Administrative Expenses:</b>	The employer contribution rates include a rate for anticipated non-investment expenses.
<b>Plan 1:</b>	Members hired prior to July 1, 2010 and who were vested as of January 1, 2013.
<b>Plan 2:</b>	Members hired on or after July 1, 2010 but before January 1, 2014, or members hired prior to July 1, 2010 and who were not vested as of January 1, 2013. Members hired after January 1, 2014 in SPORS, VaLORS, and Political Subdivisions with LEOs/Fire Pension Benefit Coverage are in Plan 2.
<b>Hybrid Plan:</b>	State, Teachers, JRS, and Political Subdivisions with General Employee Pension Benefit Coverage members hired (for JRS, appointed or elected to an original term) on or after January 1, 2014 or members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1, 2014 through April 30, 2014. Members of SPORS, VaLORS, and Political Subdivisions with LEOs/Fire Pension Benefit Coverage are not eligible to participate in the Hybrid Plan.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **Assumptions and Methods Applicable to the Group Life Insurance Program**

<b>Actuarial Cost Method:</b>	Entry age normal cost method, allocated as a level percent of payroll, from first funding age to last age before terminal retirement age. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.
<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 asset value cannot be less than 80% or more than 120% of the market value of assets.
<b>Minimum Benefit:</b>	In no event will the death benefit be less than \$8,000 for members who retire with at least 30 years of creditable service. The \$8,000 minimum is assumed to apply to the fiscal year ending June 30, 2016 and is assumed to increase annually, effective July 1, by 2.25% (the same annual increase percentage for any annual post-retirement supplement for retirees, as calculated for employees hired on or after July 1, 2010).
<b>“Life Insurance Only” Retirees:</b>	Results include an estimate of retiree liability for those groups not providing retiree census data. A liability equaling 10% of the active employee liability times the average retiree to active liability ratio is assumed.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Health Insurance Credit Program State Employees and Teachers**

**Actuarial Cost Method:** Entry age normal cost method, allocated as a level percent of payroll, from first funding age to last age before terminal retirement age. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.

**Asset Valuation Method:** The method of valuing assets is intended to recognize a “smoothed” market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a five-year period. The resulting actuarial value of asset value cannot be less than 80% or more than 120% of the market value of assets.

**Participation Rates:** 95% of eligible future service retirees from active status are assumed to utilize the benefit plan.

Eligible future service retirees from deferred vested status are assumed to utilize the benefit plan as follows:

<b>Duration Since Retirement</b>	<b>Participation Rate</b>
First Year	55.0%
Second Year	65.0%
Third Year	70.0%
Fourth Year	75.0%
Fifth Year	80.0%
Sixth Year	85.0%
Seventh Year	90.0%
Eighth Year and Beyond	95.0%

**Participation Rates (continued):** Eligible future disabled benefit recipients from active status are assumed to utilize the benefit plan as follows:

<b>System</b>	<b>Participation</b>
State/JRS	95%
Teachers	90%
SPORS/VaLORS	75%



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Health Insurance Credit Program State Employees and Teachers (continued)**

#### **Percentage Not Utilizing the Maximum Benefit:**

The percentage of eligible future benefit recipients assumed to utilize the benefit plan, but not receive the maximum benefit for which they are eligible is as follows:

<b>System</b>	<b>Percentage</b>
State/JRS	10%
Teachers	20%
SPORS/VaLORS	10%

#### **Percentage of Maximum Benefit Received:**

Eligible future benefit recipients assumed to utilize the benefit plan, but not receive the maximum benefit for which they are eligible are assumed to initially receive 70% of the maximum benefit for which they are eligible.

#### **Annual Increase in Benefit for Those Not Receiving the Maximum Benefit:**

Benefit recipients assumed to utilize the benefit plan, but not receiving the maximum benefit for which they are eligible are assumed to have their benefit increase at the following rates:

<b>Duration Since Retirement</b>	<b>Annual Increase in HIC benefit</b>
1 Year	6.50%
2 – 3 Years	4.25%
4 or More Years	3.00%

#### **Percentage of Future Eligible Deferred Vested Members Electing to Withdraw from VRS:**

The percentage of future eligible deferred vested members assumed to withdraw from VRS is as follows:

<b>System</b>	<b>Percentage</b>
State/JRS	50%
Teachers	35%
SPORS/VaLORS	70%



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Health Insurance Credit Program State Employees and Teachers (continued)**

**Deferred Vested Deferral Period:** Eligible deferred vested members are assumed to begin receiving benefits at the following ages:

<b>System</b>	<b>Age of Initial Benefit Receipt</b>
State/JRS/Teachers	
Plan 1 Members	60
Plan 2 and Hybrid Plan Members	
Born prior to 1938	60
Born after 1937 and before 1960	61
Born after 1959	62
SPORS/VaLORS	
Members with less than 25 years of service	55
Members with 25 or more years of service	50

**ORP and UVA Retirees:** Results include an estimate of retiree liability for those groups not providing retiree census data. A liability equaling 10% of the active employee liability times the average retiree to active liability ratio is assumed.





## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Health Insurance Credit Program Political Subdivisions and Special Coverage Groups**

**Actuarial Cost Method:** Entry age normal cost method, allocated as a level percent of payroll, from first funding age to last age before terminal retirement age. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.

**Asset Valuation Method:** Market value of assets.

**Participation Rates:** 85% of eligible future service retirees from active status are assumed to utilize the benefit plan. 45.00% of eligible future disability retirees will utilize the benefit.

Eligible future service retirees from deferred vested status are assumed to utilize the benefit plan as follows:

<b>Duration Since Retirement</b>	<b>Participation Rate</b>
First Year	55.0%
Second Year	65.0%
Third Year	70.0%
Fourth Year	75.0%
Fifth Year	80.0%
Sixth Year	85.0%
Seventh Year	90.0%
Eighth Year and Beyond	95.0%

**Percentage Not Utilizing the Maximum Benefit:** 5% of eligible future benefit recipients are assumed to utilize the benefit plan, but not receive the maximum benefit for which they are eligible.

**Percentage of Maximum Benefit Received:** Eligible future benefit recipients assumed to utilize the benefit plan, but not receive the maximum benefit for which they are eligible are assumed to initially receive 70% of the maximum benefit for which they are eligible.

**Annual Increase in Benefit for Those Not Receiving the Maximum Benefit:** Benefit recipients assumed to utilize the benefit plan, but not receiving the maximum benefit for which they are eligible are assumed to have their benefit increase at the following rates:

<b>Duration Since Retirement</b>	<b>Annual Increase in HIC benefit</b>
1 Year	6.50%
2 – 3 Years	4.25%
4 or More Years	3.00%



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Health Insurance Credit Program Political Subdivisions and Special Coverage Groups (continued)**

**Percentage of Future Eligible  
Deferred Vested Members Electing  
to Withdraw from VRS:**

45% of future eligible deferred vested members are assumed to withdraw from VRS.

**Deferred Vested Deferral Period:**

Eligible deferred vested members with LEOs/Fire Pension Benefit Coverage are assumed to receive benefits at age 55 (if the member has less than 25 years of service at retirement) and at age 50 (if the member has 25 or more years of service at retirement). Eligible deferred vested members with General Employee Pension Benefit Coverage are assumed to receive benefits as follows:

<b>Political Subdivisions and Special Coverage Groups</b>	<b>Age of Initial Benefit Receipt</b>
Plan 1 Members	60
Plan 2 and Hybrid Plan Members	
Born prior to 1938	60
Born after 1937 and before 1960	61
Born after 1959	62

**Employer Groups:**

The political subdivisions have been divided into two groups. Group A consists of: City of Virginia Beach, Henrico County, Prince William County, Chesterfield County, City of Chesapeake, City of Alexandria, City of Hampton, Loudoun County, City of Lynchburg, and the City of Portsmouth. Group B is all other political subdivisions not included in Group A.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Disability Benefits and Long-Term Care Benefits**

**Asset Valuation Method:**

The method of valuing assets is intended to recognize a “smoothed” market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a five-year period. The resulting actuarial value of asset value cannot be less than 80% or more than 120% of the market value of assets.

**Health Insurance Credit and  
Group Life Insurance Benefits**

Health Insurance Credit and Group Life Insurance benefits provided by VSDP are valued under the respective plans.

**Disability:**

A Plan 1 Member hired prior to January 1, 1999 and who has elected VSDP coverage or any member hired on or after January 1, 1999. Applicable members hired prior to July 1, 2009 are eligible from the first day of employment for work related and non-work related VSDP disability benefits. Applicable members hired on or after July 1, 2009 are eligible from the first day of employment for work-related VSDP disability benefits, but must have a minimum of one year of service to be eligible for non-work related VSDP disability benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Disability Benefits**

**Actuarial Cost Method:** Entry age normal cost method, allocated as a level percent of payroll, from first funding age to last age before terminal retirement age. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.

**Cost-Of-Living Increase:**

Plan 1 Members: 2.50% per year, compounded annually.

Plan 2 and Hybrid Members: 2.25% per year, compounded annually.

**Liability Assumed for Disabled Members in Waiting Period:**

The liability associated for those disabled and not yet eligible to receive benefits was based upon the development method in which plan experience was applied to those claims reported in the second half of the most recent fiscal year

**Income Replacement for Future Disabled Members:**

61% of a member's pre-disability income.

**Offsets for Disabled Members:**

It is assumed that the offset amounts reported by the administrator will continue to apply to each member's benefit until the benefit expires. For members with less than six years of disability and no current benefit offsets, benefit amounts are adjusted to reflect future offsets as follows:

<b>Year of Long-Term Disability</b>	<b>Percentage Receiving Offsets in the Next Year if Currently Not in Receipt</b>	<b>Average Percentage of Full Benefit Paid if in Receipt of Offsets</b>
1	38%	25%
2	32%	25%
3	24%	25%
4	14%	25%
5	14%	25%
6 and Longer	0%	30%



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Disability Benefits (continued)**

#### **Offsets for Active Members:**

The following benefit adjustments are assumed for the expected future monthly benefits to be paid to future disabled members. The benefit adjustments are consistent with recent experience.

<b>Year of Long-Term Disability</b>	<b>Benefit Adjustment Factor</b>
1	0.745
2	0.557
3	0.493
4	0.439
5	0.414
6 and Longer	0.378

#### **Rates of Termination of Benefits Due to Death or Recovery:**

2012 Group Long Term Disability Valuation Table (2012 GLDT) as proposed by the Society of Actuaries' Group Disability Experience Committee for use by the National Association of Insurance Commissioners. Used as a basis those rates applicable to plans with a six-month elimination period, "Own Occupation" definition of disability, initial maximum guaranteed benefit of \$1,900, "No Diagnosis" cause of disability, 15% margin for recovery, 28% margin for deaths, and adjusted for prior five years of VRS experience with the following adjustment factors:

<b>Month of Disability</b>	<b>Male</b>	<b>Female</b>
4 - 24	0.944	0.870
25 - 60	1.016	0.992
61 - 120	1.086	1.083
121 and over	1.066	1.095



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Care Benefits**

<b>Actuarial Cost Method:</b>	Projected Unit Credit cost method. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.
<b>Disabled Life Reserve:</b>	The liability associated for those participants assumed to be in a current benefit period was based upon the development method in which prior experience was applied to the current claim duration and prior payments made for each individual.
<b>Incurred But Not Reported Reserve:</b>	The liability associated for those participants with claims that have been incurred but not reported (IBNR), as of the valuation date, to the administrator was based upon the development method in which prior experience for claim incidence and expected benefits payments was applied to the covered population.
<b>Morbidity:</b>	CMC reviewed the rates developed by the prior actuary against rates developed using the Society of Actuaries (SOA) Long Term Care basic experience rate tables and made no modifications. While separate rates for assisted living facility claims are not used, our review indicates the nursing facility rates are reasonable based upon the benefit structure and a comparison to the combined experience produced by the SOA's tables. As experience develops the rates will need to be reviewed and adjusted accordingly.

<b>Unadjusted Claim Incidence Rates</b>				
<b>Attained Age</b>	<b>Nursing Facility</b>		<b>Home Health</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
25	0.00001	0.00001	0.00008	0.00008
30	0.00003	0.00002	0.00010	0.00010
35	0.00008	0.00005	0.00012	0.00013
40	0.00013	0.00009	0.00018	0.00015
45	0.00021	0.00014	0.00028	0.00017
50	0.00031	0.00020	0.00039	0.00029
55	0.00047	0.00029	0.00053	0.00047
60	0.00060	0.00065	0.00085	0.00092
65	0.00100	0.00107	0.00150	0.00162
70	0.00210	0.00191	0.00249	0.00295
75	0.00480	0.00507	0.00482	0.00541
80	0.01023	0.01327	0.00895	0.00917
85	0.02155	0.03171	0.01541	0.01511
90	0.04111	0.06180	0.02249	0.02042
95	0.05844	0.08370	0.02522	0.02190
100	0.07276	0.09756	0.02598	0.02198
105	0.09059	0.11372	0.02677	0.02206
110+	0.11279	0.13255	0.02758	0.02213



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Care Benefits (continued)**

**Morbidity (continued):**

For actively employed members, the unadjusted claim incidence rates are adjusted by the following selection factors based upon length of VSDP membership and age of entry into VSDP.

<b>Claim Incidence Selection Factors</b>			
<b>Actively Employed Members</b>			
<b>Years of VSDP Membership</b>	<b>VSDP Entry Age</b>		
	<b>&lt;50</b>	<b>50 - 64</b>	<b>65+</b>
1	0.133	0.138	0.164
2	0.217	0.222	0.256
3	0.284	0.289	0.342
4	0.334	0.341	0.438
5	0.367	0.375	0.520
6	0.439	0.447	0.547
7	0.473	0.482	0.573
8	0.500	0.511	0.593
9	0.527	0.538	0.612
10	0.561	0.573	0.634
11	0.599	0.612	0.673
12	0.643	0.658	0.719
13	0.702	0.718	0.755
14	0.769	0.787	0.797
15	0.836	0.836	0.840
16	0.851	0.851	0.855
17	0.869	0.869	0.872
18	0.890	0.890	0.893
19	0.915	0.915	0.918
20+	0.945	0.945	0.947



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Care Benefits (continued)**

**Morbidity (continued):**

For ported members, the unadjusted claim incidence rates are adjusted based upon the likelihood of porting and the number of years since porting.

Claim Incidence Selection Factors		
Ported Members		
Porting Rate	Initial Year Of Porting	Ultimate Rate*
0%	2.35	1.19
5%	2.29	1.18
10%	2.22	1.18
15%	2.16	1.17
20%	2.09	1.16
25%	2.03	1.16
30%	1.96	1.15
35%	1.90	1.14
40%	1.83	1.13
45%	1.77	1.13
50%	1.70	1.12
55%	1.64	1.11
60%	1.57	1.11
65%	1.51	1.10
70%	1.44	1.09
75%	1.38	1.09
80%	1.31	1.08
85%	1.25	1.07
90%	1.18	1.06
95%	1.12	1.06
100%	1.05	1.05

\* The selection factors are assumed to decrease linearly over a 10 year period.





## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Care Benefits (continued)**

**Morbidity (continued):**

The duration of a claim is based upon the attained age at incidence, gender, and type of claim.

Attained Age	Length of Stay (Months)			
	Nursing Facility		Home Health	
	Male	Female	Male	Female
25	11.15	13.96	19.14	12.54
30	11.60	14.42	18.81	12.47
35	12.04	14.98	18.67	12.45
40	12.29	14.87	16.77	13.48
45	12.50	14.77	14.99	14.56
50	12.90	14.16	15.36	13.78
55	13.30	13.52	15.77	13.02
60	12.99	14.12	15.15	12.40
65	13.36	14.30	12.84	12.80
70	14.00	14.32	11.80	13.53
75	13.99	15.09	11.50	13.50
80	13.76	15.61	10.90	13.18
85	13.62	15.90	10.05	12.86
90	13.09	16.19	8.78	12.70
95	12.30	16.51	8.23	12.66
100	11.32	16.10	8.70	13.34
105	9.84	14.77	9.56	14.60
110+	8.31	13.32	9.33	14.89

**Daily Benefit Amount:**

\$96 per day indemnity benefit paid for service in a nursing home. The daily benefit for home health care coverage is 50% of the nursing home benefit.

**Daily Benefit Amount Increases:**

The valuation does not include a provision for increases (i.e., 5% compound increase every five years). If the benefit policy is to provide increases at regular intervals, the resulting liability will be materially greater than the results presented (i.e., inflation increases are not assumed to be pre-funded).

**Benefit Maximums:**

A lifetime maximum benefit of \$70,080 (reflects a two year maximum coverage period based upon a \$96 per day indemnity benefit).



## Schedule D – Outline of Actuarial Assumptions and Methods (continued)

### Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Care Benefits (continued)

#### Porting Rates:

Porting rate assumptions are based upon experience over the first five years of the program, with substantial increases over the life of the program. CMC reviewed the rates developed by the prior actuary and made no modifications. As the porting rates have a significant impact on results; experience, as it develops, will need to be reviewed and the rates adjusted accordingly. Porting rates by age of entry into VSDP and length of VSDP membership are provided in the following table.

VSDP Entry Age	Years of VSDP Membership										
	0	5	10	15	20	25	30	35	40	45	50+
25	0.1000	0.1010	0.1144	0.1313	0.1739	0.2555	0.3693	0.5263	0.6812	0.8874	1.0000
30	0.1000	0.1019	0.1234	0.1534	0.2185	0.3194	0.4537	0.5822	0.7574	0.9609	1.0000
35	0.1000	0.1021	0.1303	0.1778	0.2683	0.3935	0.5001	0.6454	0.8406	1.0000	1.0000
40	0.1000	0.1063	0.1608	0.2383	0.3423	0.4320	0.5526	0.7169	0.9230	1.0000	1.0000
45	0.1001	0.1177	0.2001	0.2931	0.3754	0.4755	0.6119	0.7978	0.9983	1.0000	1.0000
50	0.1027	0.1304	0.2244	0.3262	0.4116	0.5247	0.6790	0.8833	1.0000	1.0000	1.0000
55	0.1072	0.1410	0.2422	0.3585	0.4524	0.5804	0.7549	0.9624	1.0000	1.0000	1.0000
60	0.1162	0.1596	0.2667	0.3924	0.4986	0.6434	0.8407	1.0000	1.0000	1.0000	1.0000
65	0.1329	0.1887	0.2999	0.4307	0.5508	0.7146	0.9257	1.0000	1.0000	1.0000	1.0000
70	0.1485	0.2129	0.3308	0.4741	0.6099	0.7952	0.9985	1.0000	1.0000	1.0000	1.0000
75	0.1700	0.2444	0.3693	0.5231	0.6768	0.8863	1.0000	1.0000	1.0000	1.0000	1.0000
80	0.1875	0.2682	0.4043	0.5786	0.7524	0.9645	1.0000	1.0000	1.0000	1.0000	1.0000
85	0.1941	0.2770	0.4310	0.6413	0.8379	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
90	0.2012	0.2863	0.4601	0.7123	0.9347	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
95	0.2088	0.2960	0.4917	0.7925	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	0.2171	0.3063	0.5261	0.8833	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
105	0.2259	0.3171	0.5635	0.9860	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
110	0.2354	0.3284	0.6042	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
115	0.2457	0.3404	0.6485	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
120	0.2567	0.3529	0.6966	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Sickness and Disability Program Long-Term Care Benefits (continued)**

#### **Porting Premiums:**

While actively employed or receiving LTD benefits, a member receives coverage in the amount currently in place for the entire actively employed group. Upon termination of employment, a member has the option to port the amount of coverage current for the group by paying a premium. CMC reviewed the rates developed by the prior actuary for adequacy and made no modifications. As experience develops the rates may need to be reviewed and adjusted accordingly.

Monthly Porting Premium Rates Per \$1 of Daily Benefit Amount							
VSDP Entry Age	Rate	VSDP Entry Age	Rate	VSDP Entry Age	Rate	VSDP Entry Age	Rate
20	0.018	38	0.070	56	0.233	74	1.212
21	0.019	39	0.075	57	0.255	75	1.331
22	0.020	40	0.078	58	0.278	76	1.466
23	0.022	41	0.084	59	0.305	77	1.619
24	0.023	42	0.089	60	0.335	78	1.786
25	0.025	43	0.095	61	0.368	79	1.968
26	0.028	44	0.100	62	0.406	80	2.153
27	0.030	45	0.106	63	0.448	81	2.329
28	0.033	46	0.112	64	0.497	82	2.503
29	0.035	47	0.121	65	0.539	83	2.676
30	0.038	48	0.128	66	0.596	84	2.835
31	0.041	49	0.136	67	0.662	85	2.971
32	0.046	50	0.144	68	0.717	86	3.134
33	0.050	51	0.155	69	0.777	87	3.277
34	0.053	52	0.166	70	0.845	88	3.405
35	0.057	53	0.180	71	0.922	89	3.522
36	0.061	54	0.196	72	1.007	90	3.610
37	0.065	55	0.213	73	1.105		



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Disability Benefits and Long-Term Care Benefits**

<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 asset value cannot be less than 80% or more than 120% of the market value of assets.
<b>Health Insurance Credit and Group Life Insurance Benefits</b>	Health Insurance Credit (if applicable) and Group Life Insurance benefits provided under VLDP are valued under the respective plans.
<b>Disability:</b>	Applicable members covered under the Hybrid Plan are eligible from the first day of employment for work-related VLDP disability benefits, but must have a minimum of one year of service to be eligible for non-work related VLDP disability benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Disability Benefits**

<b>Actuarial Cost Method:</b>	Entry age normal cost method, allocated as a level percent of payroll, from first funding age to last age before terminal retirement age. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.
<b>Cost-Of-Living Increase:</b>	0.00% per year, compounded annually.
<b>Liability Assumed for Disabled Members in Waiting Period:</b>	The liability associated for those disabled and not yet eligible to receive benefits was based upon the expected number of long-term disabilities incurred during the period of January 1, 2015 and June 30, 2015.
<b>Income Replacement for Future Disabled Members:</b>	61% of a member's pre-disability income.
<b>Offsets for Disabled Members:</b>	It is assumed that the offset amounts reported by the administrator will continue to apply to each member's benefit until the benefit expires. For members with less than six years of disability and no current benefit offsets, benefit amounts are adjusted to reflect future offsets as follows:

<b>Year of Long-Term Disability</b>	<b>Percentage Receiving Offsets in the Next Year if Currently Not in Receipt</b>	<b>Average Percentage of Full Benefit Paid if in Receipt of Offsets</b>
1	38%	25%
2	32%	25%
3	24%	25%
4	14%	25%
5	14%	25%
6 and Longer	0%	30%



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Disability Benefits (continued)**

#### **Offsets for Active Members:**

The following benefit adjustments are assumed for the expected future monthly benefits to be paid to future disabled members. The benefit adjustments are consistent with recent experience.

<b>Year of Long-Term Disability</b>	<b>Benefit Adjustment Factor</b>
1	0.745
2	0.557
3	0.493
4	0.439
5	0.414
6 and Longer	0.378

#### **Rates of Termination of Benefits Due to Death or Recovery:**

2012 Group Long Term Disability Valuation Table (2012 GLDT) as proposed by the Society of Actuaries' Group Disability Experience Committee for use by the National Association of Insurance Commissioners. Used as a basis those rates applicable to plans with a six-month elimination period, "Own Occupation" definition of disability, initial maximum guaranteed benefit of \$1,900, "No Diagnosis" cause of disability, 15% margin for recovery, 28% margin for deaths, and adjusted for prior five years of VRS experience with the following adjustment factors:

#### **Adjustment Factor**

<b>Month of Disability</b>	<b>Male</b>	<b>Female</b>
4 - 24	0.944	0.870
25 - 60	1.016	0.992
61 - 120	1.086	1.083
121 and over	1.066	1.095



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Care Benefits**

<b>Actuarial Cost Method:</b>	Projected Unit Credit cost method. Actuarial gains and losses, as they occur, are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.
<b>Disabled Life Reserve:</b>	The liability associated for those participants assumed to be in a current benefit period was based upon the development method in which prior experience was applied to the current claim duration and prior payments made for each individual.
<b>Incurred But Not Reported Reserve:</b>	The liability associated for those participants with claims that have been incurred but not reported (IBNR) as of the valuation date to the administrator was based upon the development method in which prior experience for claim incidence and expected benefits payments was applied to the covered population.
<b>Morbidity:</b>	CMC reviewed the rates developed by the prior actuary against rates developed using the Society of Actuaries (SOA) Long Term Care basic experience rate tables and made no modifications. While separate rates for assisted living facility claims are not used, our review indicates the nursing facility rates are reasonable based upon the benefit structure and a comparison to the combined experience produced by the SOA's tables. As experience develops the rates will need to be reviewed and adjusted accordingly.

<b>Unadjusted Claim Incidence Rates</b>				
<b>Attained Age</b>	<b>Nursing Facility</b>		<b>Home Health</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
25	0.00001	0.00001	0.00008	0.00008
30	0.00003	0.00002	0.00010	0.00010
35	0.00008	0.00005	0.00012	0.00013
40	0.00013	0.00009	0.00018	0.00015
45	0.00021	0.00014	0.00028	0.00017
50	0.00031	0.00020	0.00039	0.00029
55	0.00047	0.00029	0.00053	0.00047
60	0.00060	0.00065	0.00085	0.00092
65	0.00100	0.00107	0.00150	0.00162
70	0.00210	0.00191	0.00249	0.00295
75	0.00480	0.00507	0.00482	0.00541
80	0.01023	0.01327	0.00895	0.00917
85	0.02155	0.03171	0.01541	0.01511
90	0.04111	0.06180	0.02249	0.02042
95	0.05844	0.08370	0.02522	0.02190
100	0.07276	0.09756	0.02598	0.02198
105	0.09059	0.11372	0.02677	0.02206
110+	0.11279	0.13255	0.02758	0.02213



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Care Benefits (continued)**

**Morbidity (continued):**

For actively employed members, the unadjusted claim incidence rates are adjusted by the following selection factors based upon length of VLDP membership and age of entry into VLDP.

<b>Claim Incidence Selection Factors</b>			
<b>Actively Employed Members</b>			
<b>Years of VLDP Membership</b>	<b>VLDP Entry Age</b>		
	<b>&lt;50</b>	<b>50 - 64</b>	<b>65+</b>
1	0.133	0.138	0.164
2	0.217	0.222	0.256
3	0.284	0.289	0.342
4	0.334	0.341	0.438
5	0.367	0.375	0.520
6	0.439	0.447	0.547
7	0.473	0.482	0.573
8	0.500	0.511	0.593
9	0.527	0.538	0.612
10	0.561	0.573	0.634
11	0.599	0.612	0.673
12	0.643	0.658	0.719
13	0.702	0.718	0.755
14	0.769	0.787	0.797
15	0.836	0.836	0.840
16	0.851	0.851	0.855
17	0.869	0.869	0.872
18	0.890	0.890	0.893
19	0.915	0.915	0.918
20+	0.945	0.945	0.947





## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Care Benefits (continued)**

**Morbidity (continued):**

For ported members, the unadjusted claim incidence rates are adjusted based upon the likelihood of porting and the number of years since porting.

Claim Incidence Selection Factors		
Ported Members		
Porting Rate	Initial Year Of Porting	Ultimate Rate*
0%	2.35	1.19
5%	2.29	1.18
10%	2.22	1.18
15%	2.16	1.17
20%	2.09	1.16
25%	2.03	1.16
30%	1.96	1.15
35%	1.90	1.14
40%	1.83	1.13
45%	1.77	1.13
50%	1.70	1.12
55%	1.64	1.11
60%	1.57	1.11
65%	1.51	1.10
70%	1.44	1.09
75%	1.38	1.09
80%	1.31	1.08
85%	1.25	1.07
90%	1.18	1.06
95%	1.12	1.06
100%	1.05	1.05

\* The selection factors are assumed to decrease linearly over a 10 year period.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Care Benefits (continued)**

**Morbidity (continued):**

The duration of a claim is based upon the attained age at incidence, gender, and type of claim.

Attained Age	Length of Stay (Months)			
	Nursing Facility		Home Health	
	Male	Female	Male	Female
25	11.15	13.96	19.14	12.54
30	11.60	14.42	18.81	12.47
35	12.04	14.98	18.67	12.45
40	12.29	14.87	16.77	13.48
45	12.50	14.77	14.99	14.56
50	12.90	14.16	15.36	13.78
55	13.30	13.52	15.77	13.02
60	12.99	14.12	15.15	12.40
65	13.36	14.30	12.84	12.80
70	14.00	14.32	11.80	13.53
75	13.99	15.09	11.50	13.50
80	13.76	15.61	10.90	13.18
85	13.62	15.90	10.05	12.86
90	13.09	16.19	8.78	12.70
95	12.30	16.51	8.23	12.66
100	11.32	16.10	8.70	13.34
105	9.84	14.77	9.56	14.60
110+	8.31	13.32	9.33	14.89

**Daily Benefit Amount:**

\$96 per day indemnity benefit paid for service in a nursing home. The daily benefit for home health care coverage is 50% of the nursing home benefit.

**Daily Benefit Amount Increases:**

The valuation does not include a provision for increases (i.e., 5% compound increase every five years). If the benefit policy is to provide increases at regular intervals, the resulting liability will be materially greater than the results presented (i.e., inflation increases are not assumed to be pre-funded).

**Benefit Maximums:**

A lifetime maximum benefit of \$70,080 (reflects a two year maximum coverage period based upon a \$96 per day indemnity benefit).



## Schedule D – Outline of Actuarial Assumptions and Methods (continued)

### Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Care Benefits (continued)

#### Porting Rates:

Porting rate assumptions are based upon experience over the first five years of the program, with substantial increases over the life of the program. CMC reviewed the rates developed by the prior actuary and made no modifications. As the porting rates have a significant impact on results; experience, as it develops, will need to be reviewed and the rates adjusted accordingly. Porting rates by age of entry into VLDP and length of VLDP membership are provided in the following table.

VLDP Entry Age	Years of VLDP Membership										
	0	5	10	15	20	25	30	35	40	45	50+
25	0.1000	0.1010	0.1144	0.1313	0.1739	0.2555	0.3693	0.5263	0.6812	0.8874	1.0000
30	0.1000	0.1019	0.1234	0.1534	0.2185	0.3194	0.4537	0.5822	0.7574	0.9609	1.0000
35	0.1000	0.1021	0.1303	0.1778	0.2683	0.3935	0.5001	0.6454	0.8406	1.0000	1.0000
40	0.1000	0.1063	0.1608	0.2383	0.3423	0.4320	0.5526	0.7169	0.9230	1.0000	1.0000
45	0.1001	0.1177	0.2001	0.2931	0.3754	0.4755	0.6119	0.7978	0.9983	1.0000	1.0000
50	0.1027	0.1304	0.2244	0.3262	0.4116	0.5247	0.6790	0.8833	1.0000	1.0000	1.0000
55	0.1072	0.1410	0.2422	0.3585	0.4524	0.5804	0.7549	0.9624	1.0000	1.0000	1.0000
60	0.1162	0.1596	0.2667	0.3924	0.4986	0.6434	0.8407	1.0000	1.0000	1.0000	1.0000
65	0.1329	0.1887	0.2999	0.4307	0.5508	0.7146	0.9257	1.0000	1.0000	1.0000	1.0000
70	0.1485	0.2129	0.3308	0.4741	0.6099	0.7952	0.9985	1.0000	1.0000	1.0000	1.0000
75	0.1700	0.2444	0.3693	0.5231	0.6768	0.8863	1.0000	1.0000	1.0000	1.0000	1.0000
80	0.1875	0.2682	0.4043	0.5786	0.7524	0.9645	1.0000	1.0000	1.0000	1.0000	1.0000
85	0.1941	0.2770	0.4310	0.6413	0.8379	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
90	0.2012	0.2863	0.4601	0.7123	0.9347	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
95	0.2088	0.2960	0.4917	0.7925	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	0.2171	0.3063	0.5261	0.8833	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
105	0.2259	0.3171	0.5635	0.9860	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
110	0.2354	0.3284	0.6042	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
115	0.2457	0.3404	0.6485	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
120	0.2567	0.3529	0.6966	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **Assumptions and Methods Applicable to the Virginia Local Disability Program Long-Term Care Benefits (continued)**

#### **Porting Premiums:**

While actively employed or receiving LTD benefits, a member receives coverage in the amount currently in place for the entire actively employed group. Upon termination of employment, a member has the option to port the amount of coverage current for the group by paying a premium. CMC reviewed the rates developed by the prior actuary for adequacy and made no modifications. As experience develops the rates may need to be reviewed and adjusted accordingly.

Monthly Porting Premium Rates Per \$1 of Daily Benefit Amount							
VLDP Entry Age	Rate	VLDP Entry Age	Rate	VLDP Entry Age	Rate	VLDP Entry Age	Rate
20	0.018	38	0.070	56	0.233	74	1.212
21	0.019	39	0.075	57	0.255	75	1.331
22	0.020	40	0.078	58	0.278	76	1.466
23	0.022	41	0.084	59	0.305	77	1.619
24	0.023	42	0.089	60	0.335	78	1.786
25	0.025	43	0.095	61	0.368	79	1.968
26	0.028	44	0.100	62	0.406	80	2.153
27	0.030	45	0.106	63	0.448	81	2.329
28	0.033	46	0.112	64	0.497	82	2.503
29	0.035	47	0.121	65	0.539	83	2.676
30	0.038	48	0.128	66	0.596	84	2.835
31	0.041	49	0.136	67	0.662	85	2.971
32	0.046	50	0.144	68	0.717	86	3.134
33	0.050	51	0.155	69	0.777	87	3.277
34	0.053	52	0.166	70	0.845	88	3.405
35	0.057	53	0.180	71	0.922	89	3.522
36	0.061	54	0.196	72	1.007	90	3.610
37	0.065	55	0.213	73	1.105		



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **STATE\***

#### **NORMAL RETIREMENT ELIGIBILITY:**

- Plan 1 Members: A member may retire with unreduced pension benefits upon Normal Retirement on or after age 65 with credit for five years of service.
- Plan 2 and Hybrid Plan Members: A member may retire with unreduced pension benefits upon Normal Retirement once they attain their normal Social Security retirement age and have at least five years of service.

#### **EARLY RETIREMENT ELIGIBILITY:**

- Plan 1 Members: A member may retire early with unreduced pension benefits after reaching age 50 with at least 30 years of service credit. A member may retire early with reduced pension benefits after reaching age 50 with at least ten years of service credit, or age 55 with credit for at least five years of service.
- Plan 2 and Hybrid Plan Members: A member may retire early with unreduced pension benefits upon the sum of their age and their service being 90 (Rule of 90). A member may retire early with reduced pension benefits after reaching age 60 with at least five years of service credit.

#### **DISABILITY – NON-VSDP:**

A Plan 1 member hired prior to January 1, 1999 and who has declined VSDP coverage is eligible for disability retirement benefits from the first day of employment.

#### **DISABILITY – VSDP:**

A Plan 1 member hired prior to January 1, 1999 and who has elected VSDP coverage or any member hired on or after January 1, 1999. Applicable members hired prior to July 1, 2009 are eligible from the first day of employment for work related and non-work related VSDP disability benefits. Applicable members hired on or after July 1, 2009 are eligible from the first day of employment for work-related VSDP disability benefits, but must have a minimum of one year of service to be eligible for non-work related VSDP disability benefits.

\*The actuarial assumptions for State are also applied to the applicable members of the Optional Retirement Plan (ORP).



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **STATE**

#### **MORTALITY RATES:**

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00026	0.00024	0.02257	0.00014	0.00014	0.00745
25	0.00035	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00051	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00082	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00099	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00128	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00163	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00258	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00437	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00662	0.00961	0.04498	0.00421	0.00780	0.02803
70	0.00953	0.01641	0.05445	0.00596	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **STATE**

#### **RETIREMENT RATES:**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **STATE**

#### **RETIREMENT RATES:**

Plan 2 and Hybrid Plan Members: The following rates of retirement are assumed for members eligible to retire.

State Rates of Retirement, Plan 2 and Hybrid Plan				
Age	Males		Females	
	Age & Service Meets Rule of 90			
	No	Yes*	No	Yes*
<=49	0.000	0.000	0.000	0.000
50	0.000	0.350	0.000	0.350
51	0.000	0.100	0.000	0.100
52	0.000	0.100	0.000	0.100
53	0.000	0.100	0.000	0.100
54	0.000	0.100	0.000	0.100
55	0.000	0.100	0.000	0.100
56	0.000	0.100	0.000	0.100
57	0.000	0.100	0.000	0.100
58	0.000	0.100	0.000	0.100
59	0.000	0.100	0.000	0.100
60	0.050	0.100	0.055	0.150
61	0.100	0.150	0.100	0.200
62	0.150	0.250	0.150	0.300
63	0.150	0.200	0.150	0.200
64	0.150	0.200	0.150	0.200
65	0.300	0.300	0.300	0.400
66	0.300	0.250	0.300	0.300
67	0.300	0.250	0.300	0.250
68	0.300	0.200	0.300	0.250
69	0.300	0.200	0.300	0.200
>=70	1.000	1.000	1.000	1.000

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





### ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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#### **STATE**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **STATE**

#### **TERMINATION RATES:**

The following withdrawal rates are used based on age and service. (For causes other than death, disability, or retirement)

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **STATE**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **TEACHERS\***

#### **NORMAL RETIREMENT ELIGIBILITY:**

- Plan 1 Members: A member may retire with unreduced pension benefits upon Normal Retirement on or after age 65 with credit for five years of service.
- Plan 2 and Hybrid Plan Members: A member may retire with unreduced pension benefits upon Normal Retirement once they attain their normal Social Security retirement age and have at least five years of service.

#### **EARLY RETIREMENT ELIGIBILITY:**

- Plan 1 Members: A member may retire early with unreduced pension benefits after reaching age 50 with at least 30 years of service credit. A member may retire early with reduced pension benefits after reaching age 50 with at least ten years of service credit, or age 55 with credit for at least five years of service.
- Plan 2 and Hybrid Plan Members: A member may retire early with unreduced pension benefits upon the sum of their age and their service being 90 (Rule of 90). A member may retire early with reduced pension benefits after reaching age 60 with at least five years of service credit.

#### **DISABILITY – NON-HYBRID:**

Plan 1 and Plan 2 members are eligible for disability retirement benefits from the first day of employment.

#### **DISABILITY – HYBRID:**

Hybrid Plan members are eligible from the first day of employment for work-related VLDP disability benefits (or, if the employer opted-out of VLDP during the election period, a comparable plan), but must have a minimum of one year of service to be eligible for non-work related VLDP disability benefits.

\*The actuarial assumptions for Teachers are also applied to the applicable members of the Optional Retirement Plan (ORP).



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **TEACHERS**

#### **MORTALITY RATES:**

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00021	0.00022	0.01538	0.00012	0.00014	0.00540
25	0.00026	0.00028	0.01737	0.00014	0.00014	0.00562
30	0.00035	0.00036	0.02042	0.00016	0.00018	0.00609
35	0.00051	0.00057	0.02042	0.00022	0.00030	0.00597
40	0.00082	0.00086	0.01961	0.00038	0.00043	0.00551
45	0.00099	0.00104	0.01773	0.00052	0.00063	0.00540
50	0.00128	0.00135	0.01965	0.00081	0.00092	0.00819
55	0.00163	0.00195	0.02280	0.00119	0.00152	0.01409
60	0.00258	0.00382	0.02946	0.00215	0.00315	0.01976
65	0.00437	0.00755	0.03644	0.00356	0.00602	0.02535
70	0.00662	0.01348	0.04497	0.00527	0.01100	0.03405
75		0.02246	0.05729		0.01832	0.04448
80		0.04094	0.08287		0.02964	0.06283
85		0.07640	0.11724		0.04892	0.08884
90		0.13623	0.15309		0.08892	0.13188

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **TEACHERS**

#### **RETIREMENT RATES:**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **TEACHERS**

#### **RETIREMENT RATES:**

Plan 2 and Hybrid Plan Members: The following rates of retirement are assumed for members eligible to retire.

Teachers Rates of Retirement, Plan 2 and Hybrid Plan				
Age	Male		Female	
	Age & Service Meets Rule of 90			
	No	Yes	No	Yes
<=49	0.000	0.000	0.000	0.000
50	0.000	0.400	0.000	0.350
51	0.000	0.175	0.000	0.150
52	0.000	0.175	0.000	0.150
53	0.000	0.175	0.000	0.150
54	0.000	0.175	0.000	0.150
55	0.000	0.225	0.000	0.225
56	0.000	0.225	0.000	0.225
57	0.000	0.225	0.000	0.225
58	0.000	0.225	0.000	0.225
59	0.000	0.225	0.000	0.225
60	0.075	0.225	0.085	0.225
61	0.110	0.300	0.120	0.300
62	0.170	0.350	0.170	0.350
63	0.140	0.350	0.160	0.350
64	0.180	0.300	0.165	0.350
65	0.300	0.400	0.300	0.350
66	0.300	0.400	0.300	0.350
67	0.300	0.400	0.300	0.350
68	0.300	0.400	0.300	0.350
69	0.300	0.400	0.300	0.350
>=70	1.000	1.000	1.000	1.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**TEACHERS**

**DISABILITY RATES:** As shown below for selected ages.

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





## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **TEACHERS**

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

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **TEACHERS**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **SPORS**

#### **NORMAL RETIREMENT ELIGIBILITY:**

A member may retire with an unreduced pension benefit upon Normal Retirement on or after age 60 with credit for five years of service.

#### **EARLY RETIREMENT ELIGIBILITY:**

A member may retire early with a reduced pension benefit after reaching age 50 with at least five years of service credit.

#### **DISABILITY – NON-VSDP:**

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

#### **DISABILITY – VSDP:**

A Plan 1 member hired prior to January 1, 1999 and who has elected VSDP coverage or any member hired on or after January 1, 1999. Applicable members hired prior to July 1, 2009 are eligible from the first day of employment for work related and non-work related VSDP disability benefits. Applicable members hired on or after July 1, 2009 are eligible from the first day of employment for work-related VSDP disability benefits, but must have a minimum of one year of service to be eligible for non-work related VSDP disability benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **SPORS**

#### **MORTALITY RATES:**

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00031	0.00024	0.02257	0.00014	0.00014	0.00745
25	0.00040	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00070	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00092	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00116	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00149	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00206	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00353	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00571	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00733	0.00961	0.04498	0.00421	0.00780	0.02803
70	0.01869	0.01641	0.05445	0.00596	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**SPORS**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **SPORS**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **SPORS**

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

<b>SPORS Rates of Termination</b>											
<b>Age</b>	<b>Males</b>										
	<b>Years of Service</b>										
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>&gt;=10</b>
20	0.075	0.075	0.075	0.210	0.210	0.210	0.210	0.210	0.210	0.210	0.030
25	0.075	0.075	0.075	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.030
30	0.075	0.075	0.075	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.030
35	0.075	0.075	0.075	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.024
40	0.075	0.075	0.075	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.018
45	0.100	0.100	0.100	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.014
50	0.100	0.100	0.100	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000
55	0.100	0.100	0.100	0.067	0.067	0.000	0.000	0.000	0.000	0.000	0.000
60	0.100	0.100	0.100	0.075	0.075	0.000	0.000	0.000	0.000	0.000	0.000
65	0.100	0.100	0.100	0.075	0.075	0.000	0.000	0.000	0.000	0.000	0.000
70	0.100	0.100	0.100	0.075	0.075	0.000	0.000	0.000	0.000	0.000	0.000

<b>SPORS Rates of Termination</b>											
<b>Age</b>	<b>Females</b>										
	<b>Years of Service</b>										
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>&gt;=10</b>
20	0.184	0.125	0.101	0.108	0.116	0.122	0.123	0.096	0.070	0.053	0.036
25	0.183	0.133	0.108	0.105	0.104	0.105	0.102	0.083	0.066	0.054	0.044
30	0.181	0.144	0.119	0.102	0.091	0.084	0.078	0.069	0.062	0.057	0.055
35	0.170	0.144	0.121	0.100	0.085	0.074	0.067	0.063	0.062	0.060	0.061
40	0.152	0.135	0.117	0.098	0.084	0.074	0.067	0.065	0.064	0.062	0.062
45	0.127	0.117	0.108	0.098	0.090	0.082	0.077	0.075	0.068	0.064	0.059
50	0.094	0.091	0.093	0.100	0.101	0.100	0.098	0.092	0.075	0.066	0.052
55	0.052	0.057	0.074	0.102	0.119	0.126	0.129	0.118	0.084	0.067	0.041
60	0.010	0.013	0.049	0.106	0.142	0.162	0.171	0.151	0.096	0.068	0.026
65	0.000	0.000	0.015	0.111	0.171	0.205	0.222	0.191	0.110	0.069	0.006
70	0.000	0.000	0.000	0.119	0.210	0.264	0.291	0.246	0.128	0.071	0.000



### ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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#### **SPORS**

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

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





## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **JRS**

#### **WEIGHTED SERVICE CREDIT:**

Plan 1 Members: Employees receive credit of one year of service multiplied by a weighting factor of 3.5 (2.5 for judges entering JRS on or after January 1, 1995). Any non-judicial VRS service credit is not weighted.

Plan 2 and Hybrid Plan Members: Employees receive credit of one year of service multiplied by a weighting factor of:

- 1.5 for judges entering JRS before age 45,
- 2.0 for judges entering JRS between ages 45 and 54, or
- 2.5 for judges entering JRS at age 55 or older.

Any non-judicial VRS service credit is not weighted.

#### **NORMAL RETIREMENT ELIGIBILITY:**

A member may retire upon Normal Retirement on or after age 65 with credit for five years of service, or age 60 with at least 30 years of service credit.

#### **EARLY RETIREMENT ELIGIBILITY:**

A member may retire early with unreduced pension benefits at age 60 with at least 30 years of service or a member may retire early with reduced pension benefits after reaching age 55 with at least five years of service credit.

#### **DISABILITY – NON-HYBRID:**

Plan 1 and Plan 2 members are eligible for disability retirement benefits from the first day of employment.

#### **DISABILITY – HYBRID:**

Hybrid Plan members are eligible from the first day of employment for work-related disability benefits, but must have a minimum of one year of service to be eligible for non-work related disability benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **JRS**

#### **MORTALITY RATES:**

##### **Pre-Retirement:**

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

##### **Post-Retirement:**

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

##### **Post-Disablement:**

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00026	0.00024	0.02257	0.00014	0.00014	0.00745
25	0.00035	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00051	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00082	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00099	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00128	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00163	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00258	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00437	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00662	0.00961	0.04498	0.00421	0.00780	0.02803
70	0.00953	0.01641	0.05445	0.00596	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **JRS**

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

<b>JRS Rates of Retirement</b>								
<b>Age</b>	<b>Service Multiplier = 1.5</b>				<b>Service Multiplier = 2.0</b>			
	<b>Years of Service</b>				<b>Years of Service</b>			
	<b>&lt;=1</b>	<b>2 - 19</b>	<b>20</b>	<b>&gt;=21</b>	<b>&lt;=1</b>	<b>2 - 14</b>	<b>15</b>	<b>&gt;=16</b>
<=59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.50	0.50	0.00	0.00	0.50	0.50
61	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
62	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
63	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
64	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
65	0.00	0.50	0.50	0.15	0.00	0.50	0.50	0.15
66	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
67	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
68	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
69	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
70	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
71	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
72	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
>=73	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00



**Schedule D – Outline of Actuarial Assumptions and Methods (continued)**

**JRS**

JRS Rates of Retirement								
Age	Service Multiplier = 2.5				Service Multiplier = 3.5			
	Years of Service				Years of Service			
	<=1	2 - 11	12	>=13	<1	1 - 8	9	>=10
<=59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.50	0.50	0.00	0.00	0.50	0.50
61	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
62	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
63	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
64	0.00	0.00	0.50	0.15	0.00	0.00	0.50	0.15
65	0.00	0.50	0.50	0.15	0.00	0.50	0.50	0.15
66	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
67	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
68	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
69	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
70	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
71	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
72	0.00	0.15	0.15	0.15	0.00	0.15	0.15	0.15
>=73	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **JRS**

**DISABILITY RATES:** As shown below for selected ages.

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

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

**SALARY INCREASE RATES:** Salary increase rates are 4.50%.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **VaLORS**

#### **NORMAL RETIREMENT ELIGIBILITY:**

A member may retire upon Normal Retirement on or after age 60 with credit for five years of service.

#### **EARLY RETIREMENT ELIGIBILITY:**

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

#### **DISABILITY – NON-VSDP:**

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

#### **DISABILITY – VSDP:**

A Plan 1 member hired prior to January 1, 1999 and who has elected VSDP coverage or any member hired on or after January 1, 1999. Applicable members hired prior to July 1, 2009 are eligible from the first day of employment for work related and non-work related VSDP disability benefits. Applicable members hired on or after July 1, 2009 are eligible from the first day of employment for work-related VSDP disability benefits, but must have a minimum of one year of service to be eligible for non-work related VSDP disability benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **VaLORS**

#### **MORTALITY RATES:**

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00031	0.00024	0.02257	0.00014	0.00014	0.00745
25	0.00040	0.00031	0.02257	0.00014	0.00015	0.00745
30	0.00070	0.00040	0.02257	0.00018	0.00020	0.00745
35	0.00092	0.00070	0.02257	0.00030	0.00036	0.00745
40	0.00116	0.00092	0.02257	0.00043	0.00048	0.00745
45	0.00149	0.00116	0.02257	0.00063	0.00076	0.00745
50	0.00206	0.00149	0.02512	0.00092	0.00108	0.01154
55	0.00353	0.00247	0.03156	0.00148	0.00198	0.01654
60	0.00571	0.00489	0.03803	0.00272	0.00402	0.02184
65	0.00733	0.00961	0.04498	0.00421	0.00780	0.02803
70	0.01869	0.01641	0.05445	0.00596	0.01344	0.03764
75		0.02854	0.06941		0.02212	0.05223
80		0.05265	0.09215		0.03607	0.07231
85		0.09624	0.12188		0.06041	0.10020
90		0.16928	0.15524		0.11221	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**VaLORS**

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

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





***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**VaLORS**

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

VaLORS Rates of Disability	
Age	Unisex
20	0.00150
25	0.00300
30	0.00600
35	0.00800
40	0.00800
45	0.01000
50	0.01200
55	0.01200
60	0.01000
65	0.00000
70	0.00000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **VaLORS**

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

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



### ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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#### **VaLORS**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **POLITICAL SUBDIVISIONS**

#### **GROUP A**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **NORMAL RETIREMENT ELIGIBILITY:**

Plan 1 Members: A member may retire with unreduced pension benefits upon Normal Retirement on or after age 65 with credit for five years of service.

Plan 2 and Hybrid Plan Members: A member may retire with unreduced pension benefits upon Normal Retirement once they attain their normal Social Security retirement age and have at least five years of service.

#### **EARLY RETIREMENT ELIGIBILITY:**

Plan 1 Members: A member may retire early with unreduced pension benefits after reaching age 50 with at least 30 years of service credit. A member may retire early with reduced pension benefits after reaching age 50 with at least ten years of service credit, or age 55 with credit for at least five years of service.

Plan 2 and Hybrid Plan Members: A member may retire early with unreduced pension benefits upon the sum of their age and their service being 90 (Rule of 90). A member may retire early with reduced pension benefits after reaching age 60 with at least five years of service credit.

#### **DISABILITY – NON-HYBRID:**

Plan 1 and Plan 2 members are eligible for disability retirement benefits from the first day of employment.

#### **DISABILITY – HYBRID:**

Hybrid Plan members are eligible from the first day of employment for work-related VLDP disability benefits (or, if the employer opted-out of VLDP during the election period, a comparable plan), but must have a minimum of one year of service to be eligible for non-work related VLDP disability benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS**

#### **GROUP A**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **MORTALITY RATES:**

##### **Pre-Retirement:**

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set forward 4 years and Females set back 2 years.

##### **Post-Retirement:**

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

##### **Post-Disablement:**

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00029	0.00025	0.02257	0.00014	0.00014	0.00745
25	0.00037	0.00034	0.02257	0.00014	0.00016	0.00745
30	0.00064	0.00045	0.02257	0.00019	0.00022	0.00745
35	0.00089	0.00076	0.02257	0.00033	0.00038	0.00745
40	0.00110	0.00095	0.02257	0.00045	0.00052	0.00745
45	0.00142	0.00122	0.02257	0.00069	0.00081	0.00745
50	0.00188	0.00167	0.02512	0.00100	0.00119	0.01154
55	0.00320	0.00292	0.03156	0.00168	0.00231	0.01654
60	0.00530	0.00567	0.03803	0.00298	0.00457	0.02184
65	0.00717	0.01109	0.04498	0.00456	0.00878	0.02803
70	0.01465	0.01816	0.05445	0.00628	0.01515	0.03764
75		0.03181	0.06941		0.02394	0.05223
80		0.06013	0.09215		0.03987	0.07231
85		0.10670	0.12188		0.06866	0.10020
90		0.18438	0.15524		0.12400	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

**POLITICAL SUBDIVISIONS  
GROUP A**

**Assumptions for Participants with General Employee Pension Benefit Coverage**

**RETIREMENT RATES:**

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

Group A General Employee Rates of Retirement, Plan 1				
Age	Male		Female	
	Reduced Retirement	Unreduced Retirement	Reduced Retirement	Unreduced Retirement
<=49	0.000	0.000	0.000	0.000
50	0.035	0.130	0.035	0.156
51	0.035	0.125	0.035	0.122
52	0.035	0.090	0.030	0.109
53	0.035	0.104	0.040	0.113
54	0.035	0.108	0.035	0.104
55	0.050	0.115	0.050	0.143
56	0.055	0.130	0.050	0.108
57	0.049	0.130	0.050	0.117
58	0.045	0.120	0.050	0.140
59	0.045	0.135	0.060	0.134
60	0.060	0.170	0.075	0.128
61	0.105	0.190	0.100	0.177
62	0.175	0.310	0.155	0.280
63	0.130	0.210	0.135	0.277
64	0.165	0.290	0.170	0.183
65	0.300	0.410	0.300	0.296
66	0.300	0.275	0.300	0.311
67	0.300	0.240	0.300	0.332
68	0.300	0.210	0.300	0.325
69	0.300	0.100	0.300	0.225
>=70	1.000	1.000	1.000	1.000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP A**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **RETIREMENT RATES:**

Plan 2 and Hybrid Plan Members: The following rates of retirement are assumed for members eligible to retire.

<b>Group A General Employee Rates of Retirement, Plan 2 and Hybrid Plan</b>				
<b>Age</b>	<b>Male</b>		<b>Female</b>	
	<b>Reduced Retirement</b>	<b>Unreduced Retirement</b>	<b>Reduced Retirement</b>	<b>Unreduced Retirement</b>
<=49	0.000	0.000	0.000	0.000
50	0.000	0.130	0.000	0.156
51	0.000	0.125	0.000	0.122
52	0.000	0.090	0.000	0.109
53	0.000	0.104	0.000	0.113
54	0.000	0.108	0.000	0.104
55	0.000	0.115	0.000	0.143
56	0.000	0.130	0.000	0.108
57	0.000	0.130	0.000	0.117
58	0.000	0.120	0.000	0.140
59	0.000	0.135	0.000	0.134
60	0.060	0.170	0.075	0.128
61	0.105	0.190	0.100	0.177
62	0.175	0.310	0.155	0.280
63	0.130	0.210	0.135	0.277
64	0.165	0.290	0.170	0.183
65	0.300	0.410	0.300	0.296
66	0.300	0.275	0.300	0.311
67	0.300	0.240	0.300	0.332
68	0.300	0.210	0.300	0.325
69	0.300	0.100	0.300	0.225
>=70	1.000	1.000	1.000	1.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS**

**GROUP A**

**Assumptions for Participants with General Employee Pension Benefit Coverage**

**DISABILITY RATES:** As shown below for selected ages.

Group A General Employees Rates of Disability		
Age	Male	Female
20	0.00000	0.00000
25	0.00060	0.00000
30	0.00060	0.00045
35	0.00060	0.00045
40	0.00180	0.00045
45	0.00180	0.00090
50	0.00240	0.00180
55	0.00480	0.00315
60	0.00720	0.00450
65	0.00540	0.00315
70	0.00000	0.00000





## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP A**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **TERMINATION RATES:**

Plan 1 Members: The following withdrawal rates are used based on age and years of service.  
(For causes other than death, disability, or retirement)

Male Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.218	0.137	0.000
30	0.185	0.112	0.029
35	0.172	0.097	0.058
40	0.147	0.080	0.037
45	0.143	0.071	0.029
50	0.128	0.060	0.025
55	0.109	0.053	0.007
60	0.126	0.067	0.006
65	0.136	0.082	0.000

Female Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.233	0.167	0.000
30	0.213	0.141	0.074
35	0.186	0.106	0.051
40	0.160	0.093	0.039
45	0.148	0.077	0.028
50	0.130	0.064	0.026
55	0.119	0.063	0.000
60	0.135	0.062	0.000
65	0.126	0.082	0.000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP A**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **TERMINATION RATES:**

Plan 2 and Hybrid Plan Members: The following withdrawal rates are used based on age and years of service. (For causes other than death, disability, or retirement)

Male Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.218	0.137	0.000
30	0.185	0.112	0.029
35	0.172	0.097	0.058
40	0.147	0.080	0.037
45	0.143	0.071	0.029
50	0.128	0.060	0.025
55	0.109	0.053	0.007
60	0.126	0.067	0.000
65	0.136	0.082	0.000

Female Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.233	0.167	0.000
30	0.213	0.141	0.074
35	0.186	0.106	0.051
40	0.160	0.093	0.039
45	0.148	0.077	0.028
50	0.130	0.064	0.026
55	0.119	0.063	0.000
60	0.135	0.062	0.000
65	0.126	0.082	0.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP A**

**Assumptions for Participants with General Employee Pension Benefit Coverage**

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

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



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP A**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

**NORMAL RETIREMENT ELIGIBILITY:**

A member may retire with an unreduced pension benefit upon Normal Retirement on or after age 60 with credit for five years of service.

**EARLY RETIREMENT ELIGIBILITY:**

A member may retire early with a reduced pension benefit after reaching age 50 with at least five years of service credit.

**DISABILITY:**

A member is eligible for disability retirement benefits from the first day of employment.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP A**

#### **Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

#### **MORTALITY RATES:**

##### **Pre-Retirement:**

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

##### **Post-Retirement:**

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

##### **Post-Disablement:**

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00022	0.00025	0.02257	0.00014	0.00014	0.00745
25	0.00028	0.00034	0.02257	0.00014	0.00016	0.00745
30	0.00036	0.00045	0.02257	0.00019	0.00022	0.00745
35	0.00057	0.00076	0.02257	0.00033	0.00038	0.00745
40	0.00086	0.00095	0.02257	0.00045	0.00052	0.00745
45	0.00104	0.00122	0.02257	0.00069	0.00081	0.00745
50	0.00135	0.00167	0.02512	0.00100	0.00119	0.01154
55	0.00175	0.00292	0.03156	0.00168	0.00231	0.01654
60	0.00290	0.00567	0.03803	0.00298	0.00457	0.02184
65	0.00488	0.01109	0.04498	0.00456	0.00878	0.02803
70	0.00684	0.01816	0.05445	0.00628	0.01515	0.03764
75		0.03181	0.06941		0.02394	0.05223
80		0.06013	0.09215		0.03987	0.07231
85		0.10670	0.12188		0.06866	0.10020
90		0.18438	0.15524		0.12400	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

**POLITICAL SUBDIVISIONS**

**GROUP A**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

Group A LEOs/Fire Rates of Retirement		
Age	Unisex	
	Reduced Retirement	Unreduced Retirement
<=49	0.000	0.000
50	0.090	0.250
51	0.085	0.155
52	0.085	0.145
53	0.085	0.165
54	0.085	0.130
55	0.085	0.180
56	0.085	0.240
57	0.085	0.210
58	0.100	0.240
59	0.135	0.315
60	0.200	0.350
61	0.250	0.350
62	0.300	0.500
63	0.300	0.500
64	0.400	0.500
>=65	1.000	1.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS**

**GROUP A**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

**DISABILITY RATES:** As shown below for selected ages.

Group A LEOs/Fire Rates of Disability		
Age	Male	Female
20	0.00000	0.00000
25	0.00008	0.00000
30	0.00050	0.00050
35	0.00100	0.00110
40	0.00180	0.00240
45	0.00275	0.00350
50	0.00400	0.00530
55	0.00550	0.00740
60	0.00650	0.00810
65	0.00000	0.00000



**Schedule D – Outline of Actuarial Assumptions and Methods (continued)**

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**POLITICAL SUBDIVISIONS  
GROUP A**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

Group A LEOs/Fire Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.078	0.068	0.000
30	0.082	0.056	0.021
35	0.080	0.044	0.024
40	0.074	0.043	0.017
45	0.092	0.046	0.015
50	0.093	0.045	0.028
55	0.083	0.063	0.000
60	0.087	0.065	0.000





***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP A**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

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



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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### **POLITICAL SUBDIVISIONS**

#### **GROUP B\***

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **NORMAL RETIREMENT ELIGIBILITY:**

Plan 1 Members: A member may retire with unreduced pension benefits upon Normal Retirement on or after age 65 with credit for five years of service.

Plan 2 and Hybrid Plan Members: A member may retire with unreduced pension benefits upon Normal Retirement once they attain their normal Social Security retirement age and have at least five years of service.

#### **EARLY RETIREMENT ELIGIBILITY:**

Plan 1 Members: A member may retire early with unreduced pension benefits after reaching age 50 with at least 30 years service credit. A member may retire early with reduced pension benefits after reaching age 50 with at least ten years of service credit, or age 55 with credit for at least five years of service.

Plan 2 and Hybrid Plan Members: A member may retire early with unreduced pension benefits upon the sum of their age and their service being 90 (Rule of 90). A member may retire early with reduced pension benefits after reaching age 60 with at least five years of service credit.

#### **DISABILITY – NON-VLDP:**

Plan 1 and Plan 2 members are eligible for disability retirement benefits from the first day of employment.

#### **DISABILITY – VLDP:**

Hybrid Plan members are eligible from the first day of employment for work-related VLDP disability benefits (or, if the employer opted-out of VLDP during the election period, a comparable plan), but must have a minimum of one year of service to be eligible for non-work related VLDP disability benefits.

\*The actuarial assumptions for Political Subdivisions Group B are also applied to members of the political subdivisions not providing VRS pension benefits.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP B**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **MORTALITY RATES:**

##### **Pre-Retirement:**

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with Males set forward 4 years and Females set back 2 years.

##### **Post-Retirement:**

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

##### **Post-Disablement:**

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00029	0.00025	0.02257	0.00014	0.00014	0.00745
25	0.00037	0.00034	0.02257	0.00014	0.00016	0.00745
30	0.00064	0.00045	0.02257	0.00019	0.00022	0.00745
35	0.00089	0.00076	0.02257	0.00033	0.00038	0.00745
40	0.00110	0.00095	0.02257	0.00045	0.00052	0.00745
45	0.00142	0.00122	0.02257	0.00069	0.00081	0.00745
50	0.00188	0.00167	0.02512	0.00100	0.00119	0.01154
55	0.00320	0.00292	0.03156	0.00168	0.00231	0.01654
60	0.00530	0.00567	0.03803	0.00298	0.00457	0.02184
65	0.00717	0.01109	0.04498	0.00456	0.00878	0.02803
70	0.01465	0.01816	0.05445	0.00628	0.01515	0.03764
75		0.03181	0.06941		0.02394	0.05223
80		0.06013	0.09215		0.03987	0.07231
85		0.10670	0.12188		0.06866	0.10020
90		0.18438	0.15524		0.12400	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with General Employee Pension Benefit Coverage**

**RETIREMENT RATES:**

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

Group B General Employees Rates of Retirement, Plan 1				
Age	Male		Female	
	Reduced Retirement	Unreduced Retirement	Reduced Retirement	Unreduced Retirement
<=49	0.000	0.000	0.000	0.000
50	0.050	0.090	0.040	0.080
51	0.050	0.090	0.045	0.080
52	0.050	0.070	0.045	0.080
53	0.050	0.070	0.045	0.080
54	0.050	0.100	0.045	0.100
55	0.050	0.140	0.055	0.115
56	0.060	0.140	0.050	0.115
57	0.060	0.100	0.050	0.125
58	0.060	0.110	0.050	0.130
59	0.060	0.110	0.050	0.115
60	0.060	0.110	0.075	0.130
61	0.100	0.250	0.075	0.175
62	0.170	0.350	0.170	0.250
63	0.150	0.250	0.130	0.250
64	0.150	0.270	0.130	0.175
65	0.300	0.330	0.300	0.400
66	0.300	0.330	0.300	0.400
67	0.300	0.200	0.300	0.250
68	0.300	0.200	0.300	0.250
69	0.300	0.200	0.300	0.250
>=70	1.000	1.000	1.000	1.000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP B**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

#### **RETIREMENT RATES:**

Plan 2 and Hybrid Plan Members: The following rates of retirement are assumed for members eligible to retire.

<b>Group B General Employees Rates of Retirement, Plan 2 and Hybrid Plan</b>				
<b>Age</b>	<b>Male</b>		<b>Female</b>	
	<b>Reduced Retirement</b>	<b>Unreduced Retirement</b>	<b>Reduced Retirement</b>	<b>Unreduced Retirement</b>
<=49	0.000	0.000	0.000	0.000
50	0.000	0.090	0.000	0.080
51	0.000	0.090	0.000	0.080
52	0.000	0.070	0.000	0.080
53	0.000	0.070	0.000	0.080
54	0.000	0.100	0.000	0.100
55	0.000	0.140	0.000	0.115
56	0.000	0.140	0.000	0.115
57	0.000	0.100	0.000	0.125
58	0.000	0.110	0.000	0.130
59	0.000	0.110	0.000	0.115
60	0.060	0.110	0.075	0.130
61	0.100	0.250	0.075	0.175
62	0.170	0.350	0.170	0.250
63	0.150	0.250	0.130	0.250
64	0.150	0.250	0.130	0.250
65	0.300	0.250	0.300	0.250
66	0.300	0.270	0.300	0.175
67	0.300	0.330	0.300	0.400
68	0.300	0.330	0.300	0.400
69	0.300	0.200	0.300	0.250
>=70	1.000	1.000	1.000	1.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with General Employee Pension Benefit Coverage**

**DISABILITY RATES:** As shown for selected ages.

Group B General Employees Rates of Disability		
Age	Male	Female
20	0.00018	0.00006
25	0.00012	0.00006
30	0.00060	0.00024
35	0.00114	0.00048
40	0.00144	0.00126
45	0.00186	0.00270
50	0.00312	0.00450
55	0.00510	0.00696
60	0.00816	0.00552
65	0.00558	0.00270
70	0.00000	0.00000



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP B**

#### **Assumptions for Participants with General Employee Pension Benefit Coverage**

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

Male Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.235	0.140	0.000
30	0.210	0.125	0.060
35	0.185	0.105	0.055
40	0.165	0.090	0.040
45	0.155	0.080	0.030
50	0.130	0.065	0.025
55	0.120	0.065	0.010
60	0.120	0.070	0.010
65	0.120	0.080	0.000

Female Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.255	0.165	0.000
30	0.220	0.140	0.060
35	0.190	0.115	0.060
40	0.165	0.100	0.045
45	0.150	0.080	0.035
50	0.135	0.070	0.030
55	0.125	0.065	0.000
60	0.120	0.070	0.000
65	0.130	0.090	0.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with General Employee Pension Benefit Coverage**

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

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





***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

**NORMAL RETIREMENT ELIGIBILITY:**

A member may retire with an unreduced pension benefit upon Normal Retirement on or after age 60 with credit for five years of service.

**EARLY RETIREMENT ELIGIBILITY:**

A member may retire early with a reduced pension benefit after reaching age 50 with at least five years of service credit.

**DISABILITY:**

A member is eligible for disability retirement benefits from the first day of employment.



## ***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

### **POLITICAL SUBDIVISIONS GROUP B**

#### **Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

#### **MORTALITY RATES:**

##### **Pre-Retirement:**

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

##### **Post-Retirement:**

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

##### **Post-Disablement:**

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

<b>Mortality Rates</b>						
<b>Age</b>	<b>Male</b>			<b>Female</b>		
	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>	<b>Pre Retirement</b>	<b>Post Retirement</b>	<b>Post Disablement</b>
20	0.00022	0.00025	0.02257	0.00014	0.00014	0.00745
25	0.00028	0.00034	0.02257	0.00014	0.00016	0.00745
30	0.00036	0.00045	0.02257	0.00019	0.00022	0.00745
35	0.00057	0.00076	0.02257	0.00033	0.00038	0.00745
40	0.00086	0.00095	0.02257	0.00045	0.00052	0.00745
45	0.00104	0.00122	0.02257	0.00069	0.00081	0.00745
50	0.00135	0.00167	0.02512	0.00100	0.00119	0.01154
55	0.00175	0.00292	0.03156	0.00168	0.00231	0.01654
60	0.00290	0.00567	0.03803	0.00298	0.00457	0.02184
65	0.00488	0.01109	0.04498	0.00456	0.00878	0.02803
70	0.00684	0.01816	0.05445	0.00628	0.01515	0.03764
75		0.03181	0.06941		0.02394	0.05223
80		0.06013	0.09215		0.03987	0.07231
85		0.10670	0.12188		0.06866	0.10020
90		0.18438	0.15524		0.12400	0.14005

Mortality improvement is anticipated under the post-retirement assumption as projected with Scale AA.



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

Group B LEOs/Fire Rates of Retirement		
Age	Unisex	
	Reduced Retirement	Unreduced Retirement
<=49	0.000	0.000
50	0.085	0.250
51	0.090	0.140
52	0.070	0.120
53	0.080	0.120
54	0.080	0.105
55	0.085	0.175
56	0.085	0.165
57	0.085	0.185
58	0.095	0.190
59	0.115	0.285
60	0.200	0.350
61	0.250	0.350
62	0.300	0.500
63	0.300	0.500
64	0.400	0.500
>=65	1.000	1.000



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

Group B LEOs/Fire Rates of Disability	
Age	Unisex
20	0.00000
25	0.00000
30	0.00030
35	0.00068
40	0.00113
45	0.00285
50	0.00383
55	0.00480
60	0.00638
65	0.00000



**Schedule D – Outline of Actuarial Assumptions and Methods (continued)**

**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

Male Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.130	0.085	0.000
30	0.110	0.075	0.050
35	0.110	0.070	0.038
40	0.100	0.060	0.028
45	0.130	0.060	0.024
50	0.110	0.060	0.032
55	0.150	0.080	0.005
60	0.110	0.100	0.005
65	0.220	0.108	0.050

Female Rates of Termination			
Age	Years of Service		
	0 - 2	3 - 9	>=10
25	0.130	0.100	0.000
30	0.120	0.080	0.045
35	0.140	0.080	0.045
40	0.140	0.070	0.035
45	0.120	0.060	0.035
50	0.120	0.060	0.035
55	0.120	0.050	0.005
60	0.120	0.050	0.005
65	0.224	0.108	0.050



***Schedule D – Outline of Actuarial Assumptions and Methods (continued)***

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**POLITICAL SUBDIVISIONS  
GROUP B**

**Assumptions for Participants with LEOs/Fire Pension Benefit Coverage**

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

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



## ***Schedule E – Actuarial Cost Method***

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The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable upon death after retirement or disability. The calculations are based on the member's age, years of service, gender, 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 or disability 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.

The employer contributions required to support the benefits of each OPEB Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution for LTC benefits (VSDP, VLDP – Teachers, and VLDP – Political Subdivisions) is determined using the "projected unit credit" method (PUC). Under the projected unit credit method, the liability for active employees is the portion of employees' present value of expected benefits attributed to service completed to date as compared to total service at decrement. Administrative expenses are included in the normal contribution.

The normal contribution for all other OPEB Plan benefits is determined using the "entry age normal" method (EAN). 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 to meet the cost of all benefits payable on a member's behalf. Administrative expenses are included in the normal contribution.

The unfunded accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions from the present value of expected benefits to be paid from each OPEB Plan. 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 Main Plan Provisions as Interpreted for Valuation Purposes**

### **GROUP LIFE INSURANCE PROGRAM**

The Group Life Insurance Program is administered by the Board of Trustees for the Virginia Retirement System (VRS). Contributions received are held in trust. Premiums for active employees are paid to Minnesota Life which in turn pays the life insurance proceeds to the beneficiaries. Payments for postemployment benefits are made by Minnesota Life and reimbursed by the Trust. The Board sets administrative policy and determines the allocation of the assets held for investment.

The following persons are eligible to participate in the Group Life Insurance Program: Teachers, State Employees, State Police (SPORS), Judicial Employees (JRS), Virginia Law Officers (VaLORS) and those VRS members receiving long-term disability benefits from the Virginia Sickness and Disability Program (VSDP), the Virginia Local Disability Program (VLDP), or, if the employer opted-out of VLDP during the election period, a comparable plan. In addition, local political subdivisions may elect coverage. Substantially all local units covered by VRS have elected coverage in the Group Life Insurance Program, as have other political subdivisions not providing VRS pension benefits. Also, certain members of the Optional Retirement Plan (ORP) have life insurance coverage. Although certain members who were employed at the time of initial coverage under the Group Life Insurance Program may decline coverage, substantially all full-time, permanent employees participate.

Each active member is entitled to a death benefit from this plan equal to two times the member's annual rate of compensation, rounded up to the next higher multiple of \$1,000. This benefit is provided for by the purchase of a group term life insurance contract from an insurance company. Active members may also be covered by Accidental Death and Dismemberment insurance, and they may elect additional amounts of insurance. These benefits are excluded from this valuation.

Each service retiree will be entitled to a death benefit from this plan equal to the amount in effect immediately before his/her termination or retirement, reduced by 25% on January 1 of the first full year following the date the employee is separated from service and each year thereafter. In no event will the death benefit be less than 25% of the amount in effect at the date of termination or retirement or \$8,000 for members who retire with at least 30 years of creditable service (the \$8,000 is increased by the same percentage as any annual post-retirement supplement for retirees, as calculated for employees hired on or after July 1, 2010).

Each disabled member, including those receiving benefits from VSDP or VLDP, will be entitled to a death benefit from this plan, similar to the service retiree benefit, except the 25% per year reduction does not begin until the member reaches Normal Retirement Age, or the retirement date, if later. Members participating in VLDP (or a comparable plan) and State, VaLORS, and SPORS members participating in VSDP and hired on or after July 1, 2009 need at least one year of service before the member is eligible for a non-service related life insurance benefit from the Plan.

The postemployment death benefit is paid for by an addition to the contribution required to provide the active member benefit. While the active member portion of the contribution is used to purchase group term life insurance from an insurance company, the postemployment portion of the contribution is held in a trust until required to pay benefits. The postemployment contribution is actuarially determined by this valuation.





## **Schedule F – Summary of Main Plan Provisions as Interpreted for Valuation Purposes (continued)**

### **HEALTH INSURANCE CREDIT PROGRAM**

If an eligible employee has worked for more than one employer in VRS, for the purpose of this valuation, their most current (or last) employer providing HIC benefits assumes full liability for that employee.

#### **STATE EMPLOYEES (State, SPORS, JRS, VaLORS, ORP, and UVA)**

The Commonwealth shall provide a credit toward the cost of health insurance coverage for any former state employee who retired under the Virginia Retirement System (State), State Police Officers' Retirement System (SPORS), Judicial Retirement System (JRS), or Virginia Law Officers' Retirement System (VaLORS) and who rendered at least 15 years of total creditable service under the Retirement System or rendered service as a temporary employee of the General Assembly in 1972 and became a member of the retirement system from 1972 to 1985 immediately following such temporary service. The amount of each monthly health insurance credit shall be \$4 per year of creditable service, which shall be credited monthly to any retired employee participating in the Health Insurance Credit Program. However, such credit shall not exceed a beneficiary's qualified medical expenses.

An employee who retired under an Optional Retirement Plan (ORP) or the University of Virginia (UVA) may qualify for the health insurance credit if the retiree has at least 15 years of coverage under the ORP, UVA, or a combination of VRS service credit and ORP or UVA coverage equal to at least 15 years.

Disabled State retirees and Virginia Sickness and Disability Program (VSDP) beneficiaries shall receive a maximum monthly credit, which is the greater of (i) \$120, (ii) \$4 per year for each year of creditable service at the time of disability retirement, or (iii) \$4 per year for each year of creditable service at the time of eligibility for postemployment disability benefits. State, VaLORS, and SPORS employees participating in VSDP who receive long-term disability benefits from VSDP shall receive a monthly credit of \$120, or \$4 per year of creditable service at the time of disability, whichever is greater. Those employees participating in VSDP and hired on or after July 1, 2009 are required to earn one year of service to be eligible for the non-service related Health Insurance Credit disability benefit.

#### **TEACHERS**

A member who retired under the Virginia Retirement System and who rendered at least 15 years of total creditable service under VRS shall receive a health insurance credit to his monthly retirement allowance, which shall be applied to reduce the retired member's health insurance premium cost. The amount of each monthly health insurance credit shall be \$4 for each full year of the retired member's creditable service. However, such credit shall not exceed a beneficiary's qualified medical expenses.

Disabled Teacher retirees and Virginia Local Disability Program (VLDP) beneficiaries (or, if the employer opted-out of VLDP during the election period, a comparable plan) shall receive a monthly health insurance credit of \$4 multiplied by the lesser of (i) twice the amount of his creditable service or (ii) the amount of creditable service he would have completed at age 60 if he had remained in service to that age. Eligibility for the credit shall be determined in a manner prescribed by the Virginia Retirement System. Those employees participating in VLDP (or, if the employer opted-out of VLDP during the election period, a comparable plan) and hired on or after July 1, 2009 are required to earn one year of service to be eligible for the non-service related Health Insurance Credit disability benefit.



**Schedule F –Summary of Main Plan Provisions as Interpreted for Valuation Purposes (continued)**

**HEALTH INSURANCE CREDIT PROGRAM (CONTINUED)**

**POLITICAL SUBDIVISIONS**

Political subdivisions participating in the Virginia Retirement System (VRS) may elect to provide a credit toward the cost of health insurance coverage for any former employee who retired under VRS with at least 15 years of total creditable service. The amount of each monthly health insurance credit shall be \$1.50 per year of creditable service, which amount shall be paid monthly to any retired employee participating in the Health Insurance Credit Program. However, such credit shall not exceed the health insurance premium for retiree.

Disabled retirees are eligible to receive a maximum monthly credit of \$45.

In addition to the above mentioned health insurance credit, Pittsylvania County and the City of Roanoke have chosen to provide an additional health insurance credit of \$1.00 per month for each full year of the retired member's creditable service, not to exceed a maximum monthly credit of \$30. This additional benefit is available to constitutional officers, employees of constitutional officers, general registrars, employees of general registrars, and local social service employees.

**SPECIAL COVERGE GROUPS**

A local officer, as defined in the Code of Virginia §51.1-124.3, retired under the Virginia Retirement System (VRS) who rendered at least 15 years of total creditable service under VRS shall receive a monthly health insurance credit of \$1.50 per year of creditable service, not to exceed a maximum monthly credit of \$45. However, such credit shall not exceed the health insurance premium for the retiree.

Disabled retirees are eligible to receive a maximum monthly credit of \$45.



## **Schedule F – Summary of Main Plan Provisions as Interpreted for Valuation Purposes (continued)**

### **VIRGINIA SICKNESS AND DISABILITY PROGRAM**

The following employees are eligible for VSDP benefits: full-time and part-time salaried state employees who are active members of the Virginia Retirement System (State), active members of the State Police Officers' Retirement System (SPORS), and active members of the Virginia Law Officers' Retirement System (VaLORS). Newly hired or appointed faculty of state universities of higher education in teaching, research or administrative positions who elect VRS as their retirement plan, may elect coverage under VSDP or any disability plan offered by the institution. If the institution does not offer an alternative disability plan, the faculty member is automatically covered under VSDP. Any eligible employee hired on or after July 1, 2009, shall not be eligible to receive VSDP long-term disability (LTD) benefits for non-work related disabilities prior to the completion of one continuous year of employment.

LTD benefits provide income replacement for members who become disabled and are unable to work for an extended period of time. LTD benefits begin at the expiration of the maximum period of short-term disability. While on long-term disability, members continue to accrue service as a VRS-covered member. LTD recipients are not considered employees of the Commonwealth of Virginia while they are on long-term disability.

Upon attaining the normal retirement age while on LTD, a member is required to retire. However, if the member becomes disabled within five years of the normal retirement age, they will be eligible, for up to five years, to receive VSDP LTD benefits, provided the member remains medically eligible. Once such member receives VSDP LTD benefits for five years, the member must retire.

Members are eligible to receive LTD benefits while working. Long-term disability-working status is in effect if members are able to work at least 20 hours a week, but are restricted from performing the full duties of their job or working a regular schedule. A member must have returned to work with modified duties while on short-term disability to be eligible for long-term disability-working status. The benefit will be adjusted by income or wages a member earns. During the first six months of long-term disability-working, the benefit amount will be adjusted by 60 percent of income or wages earned from employment. After the first six months of long-term disability-working, the benefit amount will be adjusted by 70 percent of income or wages earned from employment.

LTD benefits provide members with an income replacement of 60 percent of a member's pre-disability income, or 80 percent for a catastrophic condition. For valuation purposes, a 2.50% Cost of Living Adjustment (COLA) is assumed for participating Plan 1 members of State, SPORS and VaLORS. For participating Plan 2 and Hybrid Plan members of State, SPORS, and VaLORS, a 2.25% COLA is assumed for the purpose of this valuation. LTD recipients are also eligible for benefits under the Health Insurance Credit Program (HIC) and are eligible for benefits under the Group Life Insurance Program (GLI). The liability associated with HIC and GLI for LTD recipients is not included as a VSDP liability, and is valued under the actuarial valuation of the HIC and GLI plans.

The LTD benefit is adjusted by any payments received as a result of the same disability from wages and salary from employment. Wages and salary include income reported on W-2 forms and income from self-employment. During the first six months on long-term disability, the amount of the adjustment depends on the income replacement level under VSDP.

LTD benefits end if the member: is able to perform the full duties of their job without restrictions, leaves covered employment and takes a refund of their member contributions and interest in their member contribution account, applies for service retirement or reaches normal retirement age, or the member does not cooperate or comply with the requirements of VSDP.

The purpose of the long-term care (LTC) benefit under VSDP is to provide members financial assistance towards long-term care services needed as a result of a catastrophic illness, injury or aging. Specifically, the LTC benefit under VSDP provides a \$96 per day indemnity benefit to reimburse qualified nursing home and assisted living costs. Additional LTC benefits are provided for qualified home health care services (50% of the nursing home daily benefit amount), and informal care (25% of the nursing home daily benefit amount). LTC benefits are paid after a 90-day elimination period following a member's certification to be unable to perform two of six activities of



**Schedule F –Summary of Main Plan Provisions as Interpreted for Valuation Purposes (continued)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM (continued)**

daily living or having a severe cognitive impairment. LTC benefits are tax qualified under the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

The LTC benefit has a lifetime maximum benefit of \$70,080 based upon a two-year maximum coverage period with a \$96 daily benefit amount (DBA) paid for nursing home care. At VRS' discretion, the DBA may be increased for inflation every five years in the amount of 5%, compounded annually since the previous increase. Since the LTC benefit's inception, VRS has elected to increase the DBA once (December of 2007). As such, the valuation does not include a provision for increases to the DBA. If the LTC benefit policy is to provide increases at regular intervals, the resulting liability will be materially greater than the results presented (i.e., inflation increases are not assumed to be pre-funded).

While actively employed or receiving LTD benefits, a member receives coverage in the amount currently in place for the actively employed group. Upon termination of employment, a member has the option to port the amount of coverage current for the actively employed group by paying a premium based upon the member's age at entry into VSDP.



***Schedule F – Summary of Main Plan Provisions as Interpreted for Valuation Purposes (continued)***

**VIRGINIA LOCAL DISABILITY PROGRAM**

The VLDP provides disability benefits for those Hybrid Plan members of Teachers and Political Subdivisions (excluding members with enhanced hazardous duty coverage) that elect to participate in VLDP.

Long-term disability (LTD) benefits provide income replacement for members who become disabled and are unable to work for an extended period of time. LTD benefits begin at the expiration of the maximum period of short-term disability. While on long-term disability, members continue to accrue service as a VRS-covered member. LTD recipients are not considered employees of their associated employer group while they are on long-term disability.

In addition an income replacement benefit, disabled members participating in the Hybrid Plan may be eligible to receive a one percent employer contribution to their defined contribution account. To be eligible for the one percent mandatory employer contribution, a Hybrid Plan member must be permanently and totally disabled as defined in §22(e)(3) of the Internal Revenue Code (Social Security Definition of Disability).

Upon attaining the normal retirement age while on LTD, a member is required to retire. However, if the member becomes approved for supplemental disability benefits on or after age 60 they will be eligible to receive VLDP LTD benefits, provided the member remains medically eligible, based on the chart below:

<b>Ages Approved for Supplemental Disability Benefits</b>	<b>Supplemental Disability Benefit Eligibility Period*</b>
60 – 64	5 Years
65 – 68	To Age 70
69 and Older	1 Year

\*Eligibility period includes short-term disability and long-term disability

Members are eligible to receive LTD benefits while working. Long-term disability-working status is in effect if members are able to work at least 20 hours a week, but are restricted from performing the full duties of their job or working a regular schedule. A member must have returned to work with modified duties while on short-term disability to be eligible for long-term disability-working status. The benefit will be adjusted by income or wages a member earns. During the first six months of long-term disability-working, the benefit amount will be adjusted by 60 percent of income or wages earned from employment. After the first six months of long-term disability-working, the benefit amount will be adjusted by 70 percent of income or wages earned from employment.

LTD benefits provide members with an income replacement of 60 percent of a member's pre-disability income, or 80 percent for a catastrophic condition. LTD recipients are also eligible for benefits under the Health Insurance Credit Program (HIC) and are eligible for benefits under the Group Life Insurance Program (GLI). The liability associated with HIC and GLI for LTD recipients is not included as a VLDP liability, and is valued under the actuarial valuation of the HIC and GLI plans.

The LTD benefit is adjusted by any payments received as a result of the same disability from wages and salary from employment. Wages and salary include income reported on W-2 forms and income from self-employment. During the first six months on long-term disability, the amount of the adjustment depends on the income replacement level under VLDP.

LTD benefits end if the member: is able to perform the full duties of their job without restrictions, leaves covered employment and takes a refund of their member contributions and interest in their member contribution account, applies for service retirement or reaches normal retirement age, or the member does not cooperate or comply with the requirements of VLDP.



***Schedule F –Summary of Main Plan Provisions as Interpreted for Valuation Purposes (continued)***

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**VIRGINIA LOCAL DISABILITY PROGRAM (continued)**

The purpose of the long-term care (LTC) benefit under VLDP is to provide members financial assistance towards long-term care services needed as a result of a catastrophic illness, injury or aging. Specifically, the LTC benefit under VLDP provides a \$96 per day indemnity benefit to reimburse qualified nursing home and assisted living costs. Additional LTC benefits are provided for qualified home health care services (50% of the nursing home daily benefit amount), and informal care (25% of the nursing home daily benefit amount). LTC benefits are paid after a 90-day elimination period following a member's certification to be unable to perform two of six activities of daily living or having a severe cognitive impairment. LTC benefits are tax qualified under the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

The LTC benefit has a lifetime maximum benefit of \$70,080 based upon a two-year maximum coverage period with a \$96 daily benefit amount (DBA) paid for nursing home care. At VRS' discretion, the DBA may be increased for inflation every five years in the amount of 5%, compounded annually since the previous increase. Since the LTC benefit's inception, VRS has elected to increase the DBA once (December of 2007). As such, the valuation does not include a provision for increases to the DBA. If the LTC benefit policy is to provide increases at regular intervals, the resulting liability will be materially greater than the results presented (i.e., inflation increases are not assumed to be pre-funded).

While actively employed or receiving LTD benefits, a member receives coverage in the amount currently in place for the actively employed group. Upon termination of employment, a member has the option to port the amount of coverage current for the actively employed group by paying a premium based upon the member's age at entry into VLDP.



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

**GROUP LIFE INSURANCE PROGRAM  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	2,861	4,541	32							7,434
25 - 29	4,304	21,550	4,875	57						30,786
30 - 34	2,688	14,143	16,187	4,818	40					37,876
35 - 39	2,120	9,939	10,997	12,721	3,204	26				39,007
40 - 44	1,852	8,984	9,605	10,017	10,173	2,228	44			42,903
45 - 49	1,691	8,529	10,088	9,815	8,991	7,480	2,967	89		49,650
50 - 54	1,498	7,018	9,196	9,687	8,023	5,838	7,330	2,449	99	51,138
55 - 59	1,029	5,136	7,371	8,316	7,765	5,576	5,932	4,893	2,568	48,586
60 - 64	502	3,026	4,630	5,647	5,802	4,558	4,585	2,905	4,268	35,923
65 - 69	147	984	1,790	2,271	2,074	1,721	1,801	1,048	1,610	13,446
70 & Up	53	357	597	722	639	416	437	269	634	4,124
<b>Totals</b>	18,745	84,207	75,368	64,071	46,711	27,843	23,096	11,653	9,179	360,873



**Schedule G – Schedule of Active Member Data (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
STATE EMPLOYEES  
(State, SPORS, JRS, VaLORS, ORP, and UVA)  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	1,153	1,262	17							2,432
25 - 29	1,755	5,310	894	19						7,978
30 - 34	1,136	5,062	3,247	835	13					10,293
35 - 39	795	3,929	3,323	2,260	670	10				10,987
40 - 44	600	3,088	3,011	2,528	1,989	500	9			11,725
45 - 49	547	2,701	2,929	2,820	2,380	1,564	868	26		13,835
50 - 54	465	2,283	2,645	2,500	2,557	1,823	2,205	785	54	15,317
55 - 59	336	1,776	2,235	2,284	2,212	1,765	2,171	1,521	1,094	15,394
60 - 64	167	1,068	1,598	1,709	1,757	1,463	1,717	1,200	1,819	12,498
65 - 69	35	287	569	752	753	617	762	497	908	5,180
70 & Up	7	62	148	187	208	158	233	132	426	1,561
<b>Totals</b>	6,996	26,828	20,616	15,894	12,539	7,900	7,965	4,161	4,301	107,200





**Schedule G – Schedule of Active Member Data (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
TEACHERS  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	439	1,961	1	0	0	0	0	0	0	2,401
25 - 29	788	11,201	2,360	3	0	0	0	0	0	14,352
30 - 34	464	5,376	8,681	2,605	4	0	0	0	0	17,130
35 - 39	442	3,422	4,585	7,328	1,484	3	0	0	0	17,264
40 - 44	416	3,372	3,865	4,622	5,312	966	8	0	0	18,561
45 - 49	383	3,284	4,123	4,360	3,869	3,856	926	14	0	20,815
50 - 54	301	2,359	3,614	4,337	3,201	2,335	2,893	823	11	19,874
55 - 59	164	1,397	2,583	3,625	3,400	2,323	2,139	2,188	795	18,614
60 - 64	76	661	1,317	2,270	2,540	2,014	1,798	1,019	1,662	13,357
65 - 69	11	205	462	764	768	674	658	380	498	4,420
70 & Up	6	43	81	151	145	102	107	69	153	857
<b>Totals</b>	3,490	33,281	31,672	30,065	20,723	12,273	8,529	4,493	3,119	147,645



**Schedule G – Schedule of Active Member Data (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
POLITICAL SUBDIVISIONS  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	268	277	5							550
25 - 29	358	913	327	7						1,605
30 - 34	236	716	761	235	5					1,953
35 - 39	159	607	602	542	138	2				2,050
40 - 44	171	592	596	591	426	110	6			2,492
45 - 49	185	588	675	600	481	308	195	12		3,044
50 - 54	168	554	657	663	431	258	363	125	5	3,224
55 - 59	110	506	582	569	436	257	267	163	86	2,976
60 - 64	50	328	409	379	283	202	226	99	115	2,091
65 - 69	25	135	182	213	136	84	76	26	32	909
70 & Up	11	71	102	102	70	21	27	17	24	445
<b>Totals</b>	1,741	5,287	4,898	3,901	2,406	1,242	1,160	442	262	21,339



**Schedule G – Schedule of Active Member Data (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
CONSTITUTIONAL OFFICERS  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	208	226	4							438
25 - 29	244	733	227	3						1,207
30 - 34	101	410	574	233	6					1,324
35 - 39	82	256	392	475	197	3				1,405
40 - 44	61	213	320	344	511	154	6			1,609
45 - 49	59	191	302	326	425	372	171	9		1,855
50 - 54	45	169	249	282	316	238	233	126	9	1,667
55 - 59	31	98	184	180	272	145	153	110	81	1,254
60 - 64	14	60	121	146	157	94	87	73	96	848
65 - 69	5	21	57	64	48	40	56	19	42	352
70 & Up			12	13	18	14	8	9	27	101
<b>Totals</b>	850	2,377	2,442	2,066	1,950	1,060	714	346	255	12,060



**Schedule G – Schedule of Active Member Data (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
SOCIAL SERVICE EMPLOYEES  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	61	31								92
25 - 29	109	247	28	1						385
30 - 34	112	245	187	28						572
35 - 39	84	183	178	124	27					596
40 - 44	86	149	154	145	121	17				672
45 - 49	58	128	146	140	118	90	28	1		709
50 - 54	37	93	129	126	120	99	72	22		698
55 - 59	30	61	109	99	103	94	107	87	41	731
60 - 64	17	35	79	80	77	70	77	41	87	563
65 - 69	7	10	28	30	25	33	29	16	30	208
70 & Up	1	1	8	2	5	7	6	1	5	36
<b>Totals</b>	602	1,183	1,046	775	596	410	319	168	163	5,262



**Schedule G – Schedule of Active Member Data (continued)**

**HEALTH INSURANCE CREDIT PROGRAM  
REGISTRARS  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	1									1
25 - 29	2	3	1							6
30 - 34	2	3	3	1						9
35 - 39	4	3	5	6						18
40 - 44	2	3	2	7	5					19
45 - 49	1	2	6	2	4	1	1			17
50 - 54	1	8	9	8	4	3	2	1		36
55 - 59		13	6	6	10	5	3	3		46
60 - 64		6	7	3	4	5	3	3	2	33
65 - 69		2	4	3	2	3	3			17
70 & Up		1	1	2	2	3	1		1	11
<b>Totals</b>	13	44	44	38	31	20	13	7	3	213



**Schedule G – Schedule of Active Member Data (continued)**

**VIRGINIA SICKNESS AND DISABILITY PROGRAM  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	1,008	897	5							1,910
25 - 29	1,541	4,091	694	13						6,339
30 - 34	943	3,453	2,729	702	8					7,835
35 - 39	685	2,516	2,472	1,879	508	7				8,067
40 - 44	523	2,205	2,132	1,837	1,347	294	5			8,343
45 - 49	488	1,998	2,222	2,001	1,456	915	460	21		9,561
50 - 54	396	1,719	2,164	1,888	1,590	1,012	1,160	391	22	10,342
55 - 59	293	1,389	1,844	1,809	1,451	949	1,117	818	495	10,165
60 - 64	133	791	1,292	1,325	1,191	802	868	581	967	7,950
65 - 69	31	196	429	561	507	300	318	225	470	3,037
70 & Up	5	40	101	124	138	64	81	59	206	818
<b>Totals</b>	6,046	19,295	16,084	12,139	8,196	4,343	4,009	2,095	2,160	74,367



**Schedule G – Schedule of Active Member Data (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
TEACHERS  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	93	306								399
25 - 29	199	558								757
30 - 34	128	273		1						402
35 - 39	137	201	3	1						342
40 - 44	120	181	1							302
45 - 49	91	181				1				273
50 - 54	77	92		2						171
55 - 59	42	64	1		1					108
60 - 64	10	22	1							33
65 - 69	1	4								5
70 & Up	2	2								4
<b>Totals</b>	900	1,884	6	4	1	1	0	0	0	2,796



**Schedule G – Schedule of Active Member Data (continued)**

**VIRGINIA LOCAL DISABILITY PROGRAM  
POLITICAL SUBDIVISIONS  
SCHEDULE OF ACTIVE MEMBER DATA  
AS OF JUNE 30, 2015**

Attained Age	Years of Service to Valuation Date									Total
	Less than 1 Year	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 or more	
Under 25	226	73								299
25 - 29	386	157	1							544
30 - 34	261	90								351
35 - 39	217	104	1							322
40 - 44	203	111	1							315
45 - 49	206	94	2							302
50 - 54	230	109	2		1					342
55 - 59	162	88								250
60 - 64	78	47					1			126
65 - 69	30	17								47
70 & Up	9	10								19
<b>Totals</b>	2,008	900	7	0	1	0	1	0	0	2,917