



#### VIRGINIA RETIREMENT SYSTEM FINANCIAL AND STATISTICAL HIGHLIGHTS - ALL PENSION TRUST FUNDS (DOLLARS IN THOUSANDS)

	2012	2011	% Change
Activity for the Year:			
Contributions	\$ 1,816,784	\$ 1,548,026	17.4%
Investment Income (Net of Investment Expenses)	\$ 637,237	\$ 8,711,612	-92.7%
Retirement Benefits	\$ 3,401,775	\$ 3,263,895	4.2%
Refunds	\$ 88,923	\$ 100,544	-11.6%
Administrative and Other Expenses (Net of			
Miscellaneous Income)	\$ 23,056	\$ 31,112	-25.9%
Increase (Decrease) in Net Assets Held in Trust for			
Pension Benefits	\$ (1,059,733)	\$ 6,864,087	-115.4%
Retirement Benefits as a Percentage of Contributions	187.2%	210.8%	
Retirement Benefits as a Percentage of Contributions			
and Investment Income	138.6%	31.8%	
Net Assets Held in Trust for Benefits at Fiscal Year End:			
Virginia Retirement System (VRS)	\$ 50,266,721	\$ 51,280,335	-2.0%
State Police Officers' Retirement System (SPORS)	\$ 575,468	\$ 598,686	-3.9%
Virginia Law Officers' Retirement System (VaLORS)	\$ 894,916	\$ 910,666	-1.7%
Judicial Retirement System (JRS)	\$ 354,250	\$ 361,401	-2.0%
Investment Performance:			
One-Year Return on Investments	1.4%	19.1%	
Three-Year Return on Investments	11.3%	2.4%	
Five-Year Return on Investments	0.8%	4.3%	
Participating Employers:			
Counties/Cities/Towns	255	254	
Special Authorities	199	195	
School Boards	144	144	
State Agencies	236	236	
Total Employers	834	829	0.6%
Members/Retirees:			
Active Members	341,826	339,740	0.6%
Retired Members	162,751	156,165	4.2%

Investment return calculations were prepared using a time-weighted return methodology.



# Virginia Retirement System

Comprehensive Annual Financial Report

For the Year Ended June 30, 2012

#### VRS STANDARDS OF CONDUCT

#### RESPONSIBILITY

We are loyal to members, beneficiaries and participants, discharging our duties for the exclusive purpose of administering benefits and providing customer services.

#### **FAIRNESS**

We work for all members, beneficiaries and participants, not for any one individual or group of individuals.

#### COMPETENCE

We strive to maintain and improve our skills and knowledge.

#### INTEGRITY

We conduct ourselves in a professional and ethical manner befitting the high level of trust bestowed upon us by our members, beneficiaries and participants.

#### AN INDEPENDENT AGENCY OF THE COMMONWEALTH OF VIRGINIA

This report was prepared by the financial, administrative and investment staff of the Virginia Retirement System.

Certificate of Achievement for Excellence in Financial Reporting

Presented to

#### Virginia Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial response (CAFRS) achieve the highest standards in government accounting and financial terminal.





**Public Pension Coordinating Council** 

# Recognition Award for Administration 2011

Presented to

#### Virginia Retirement System

In recognition of meeting professional standards for plan administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

Clan Hellingell
Alan H. Winkle

# Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Virginia Retirement System for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2011. This was the 30th consecutive year that VRS achieved this prestigious recognition.

To be awarded the certificate, a government unit must publish an easily readable and efficiently organized comprehensive annual report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. The certificate is valid for a period of one year. The VRS *Comprehensive Annual Financial Report for FY 2012* continues to conform to the Certificate of Achievement Program requirements and will be submitted to GFOA to determine its eligibility for another certificate.

#### Public Pension Coordinating Council Recognition Award for Administration

VRS received the 2011 Recognition Award for Administration from the Public Pension Coordinating Council (PPCC) in recognition of the agency's fulfillment of the Public Pension Standards. Developed by PPCC, these standards are the benchmark for measuring excellence in defined benefit plan administration. This is the System's eighth award from PPCC.

The purpose of the PPCC's awards program is to promote high professional standards for public employee retirement systems and publicly commend systems that adhere to these standards. The PPCC is a coalition of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS) and the National Council on Teacher Retirement (NCTR).

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Letter of Transmittal





#### Chairman's Letter



Diana F. Cantor, Chairman Robert P. Schultze, Director Ronald D. Schmitz, Chief Investment Officer

P.O. Box 2500 • 1200 East Main Street Richmond, Virginia 23218-2500 Toll Free: 1-888-VARETIR (827-3847) • TDD: 804-289-5919

December 5, 2012

# The Honorable Robert F. McDonnell, Governor of Virginia, and Members of the General Assembly:

I am pleased to present to you the Virginia Retirement System (VRS) Comprehensive Annual Financial Report for the fiscal year 2012.

The Virginia Retirement System (VRS) achieved a 1.4% net return on its investment portfolio for fiscal year 2012, ending the year with \$53.3 billion in assets. During fiscal year 2012, the fund's real assets program returned 11.9%. The private equity program returned 10.9%, the fixed income program returned 7.9%, and the credit strategies program returned 1.4%. The public equity program returned -4.6%, reflecting the market shifts during the year.

The portfolio included \$21.8 billion in public equity, \$12.5 billion in fixed income, \$7.2 billion in credit strategies, \$4.8 billion in private equity and \$4.3 billion in real assets, as of June 30, 2012.

Although the market did not produce the returns we had hoped for, the investment staff made the best of a difficult global market, taking advantage of every opportunity to protect the portfolio and add value. In fact, the staff beat its benchmark for the fund as a whole last year.

The Euro-zone is in economic turmoil as its banks struggle to be recapitalized and its weaker countries deal with crushing debt. These struggles are rolling across the continent from Greece to Spain and back again. Although half a world away, the VRS portfolio is not insulated from European turmoil. When markets decline in Europe, the U.S. and markets worldwide are adversely affected.

Nor has the world recovered from the 2008 financial meltdown. Thus, as the market has become more volatile, the Board has redoubled its focus on the appropriate asset allocation and risk profile of the trust fund.

Presently, the fund has an asset allocation of 60% in equity-like securities. Many pension funds have higher equity allocations. If the Board maintains this equity allocation and global equities take off, VRS could be left behind its peers. On the other hand, if the Board increases its equity allocation, the portfolio would be exposed to higher volatility and a higher risk of loss. To focus on this challenge, the Board formed an Investment Policy Committee, tasked with analyzing and structuring an appropriate asset allocation and risk profile for the portfolio. The work of this committee will be ongoing over the next year as we thoroughly examine alternatives and their corresponding impacts, both long and short term.

Virginia has been taking up pension reform along with more than 40 other states that are also examining their plans for future cost savings in order to maintain their solvency. On the heels of the 2010 session of the General Assembly, which enacted a new tier of benefits called Plan 2, the 2012 session took reform even further by enacting a new hybrid plan for state and local employees, except public safety employees, hired on or after January 1, 2014. Our administrative staff is now turning its attention to many more months of effort toward implementing system changes, operational procedures, vendor selection, online tools and communication materials to get ready for the many changes in benefit plans.

Another aspect of the pension reform legislation also important to the Board is the prospect of reaching full funding of the recommended contribution rates. Contribution rates for many years have been too low, but you and your colleagues adopted a schedule by which contribution rates will gradually rise over the next four biennia. Starting with this new biennium, rates are increased to almost 70% of the Board's certified levels and are scheduled to gradually rise to 100% of the Board's levels by fiscal year 2019. I must stress that future improvements in the fiscal condition of these plans will be inextricably linked to your commitment and that of future Governors and General Assemblies to maintaining this schedule.

We estimate the funded status of the plans will gradually decline as contribution rates remain below recommended levels. Market returns are unlikely to make up the difference. Pension reform will help, but since most of the benefit changes apply to future generations of employees, the associated cost reductions will be slow in coming. Pension reform by itself, if not also accompanied by contribution increases, will not restore our funded status to prudent levels.

I would like to conclude my message by recognizing our new Chief Investment Officer, Ronald D. Schmitz, who came to VRS in October 2011. Beginning in 2002, Ron was responsible for the investment of the \$52 billion Oregon Public Employees Retirement Fund, the \$3 billion State Accident Insurance Fund and the \$12 billion cash management account for state and local governments in Oregon. Prior to that, Ron served as the Chief Investment Officer of the Illinois State Board of Investment.

During Ron's service in Oregon, the Oregon fund was recognized as "Pension Plan of the Year" by *Plan Sponsor* magazine. During his tenure, Wilshire Associates ranked Oregon's investment performance in the top three percentile of public funds in the United States. *Private Equity Analyst Magazine* also voted the Oregon fund into its Private Equity Hall of Fame. Additionally, Ron was personally designated by *Institutional Investor* magazine as "Investment Executive of the Year." With all these achievements, he also found time to serve on the Board of the R. F. Toigo Foundation, which fosters educational scholarships and opportunities for women and minorities in the investment industry.

On behalf of the Board of Trustees and the VRS staff, I would like to express our gratitude to you for your continued support and leadership. The Board stands ready to assist you in fully implementing the reforms of the 2012 session.

Sincerely,

Diana F. Cantor

Chairman

Virginia Retirement System

Marker

#### COMPOSITION OF THE BOARD

Nine members serve on the VRS Board of Trustees. Their appointment is shared between the executive and legislative branches of state government. The Governor appoints five members, including the chairman. The Joint Rules Committee of the Virginia General Assembly appoints four members. The General Assembly confirms all appointments.

Of the nine Board members, four must be investment experts; one must be experienced in employee benefit plans; one must be a local government employee; one must be an employee of a Virginia public institution of higher education; one must be a state employee; and one must be a public school teacher. The public employee members may be either active or retired.

	TRUSTEE	BOARD SEAT HELD	APPOINTED BY	TERM EXPIRES	COMMITTEE ASSIGNMENTS
120	Diana F. Cantor Chairman Alternative Investment Management	Investment Professional	Governor	2/28/2015 As Chair: 5/4/2013	Administration & Personnel (Chairman)  Audit & Compliance
	ivianayement			3/4/2013	Investment Policy Committee (Chairman)
90	John M. Albertine, Ph.D. Vice Chairman Albertine Enterprises	Investment Professional	Joint Rules Committee	2/28/2013	Administration & Personnel (Vice Chairman)
					Investment Policy Committee (Vice Chairman)
(a)	A. Marshall Acuff, Jr. Cary Street Partners	Investment Professional	Governor	2/28/2016	Administration & Personnel
					Investment Policy Committee
	Edwin T. Burton III, Ph.D. University of Virginia	Investment Professional	Joint Rules Committee	2/28/2014	Administration & Personnel
					Investment Policy Committee

#### BOARD OF TRUSTEES, cont.

	TRUSTEE	BOARD SEAT HELD	APPOINTED BY	TERM EXPIRES	COMMITTEE ASSIGNMENTS
	<b>Robert L. Greene</b> Syncom Venture Partners	Employee Benefit Plans Professional	Governor	2/28/2017	Audit & Compliance (Chairman)
					Investment Policy Committee
	Mitchell L. Nason Prince William County Department of Fire and Rescue	Local Government Employee	Governor	2/28/2013	Benefits & Actuarial Committee (Vice Chairman)
	anu nescue				Defined Contribution Plans Advisory Committee (Vice Chairman)
					Investment Policy Committee
	<b>Colette Sheehy</b> University of Virginia	Higher Education Representative	Governor	2/28/2014	Audit & Compliance Committee (Vice Chairman)
					Defined Contribution Plans Advisory Committee (Chairman)
					Investment Policy Committee
	Paul W. Timmreck Virginia Commonwealth University (Retired)	State Employee	Joint Rules Committee	2/28/2011	Benefits & Actuarial Committee (Chairman)
	Raymond B. Wallace, Jr. Henrico County Public	Teacher	Joint Rules Committee	2/29/2012	Administration & Personnel Committee
3	Schools (Retired)				Benefits & Actuarial Committee
					Investment Policy Committee

### VRS Organization

#### **BOARD OF TRUSTEES**

#### ADMINISTRATION



Robert P. Schultze Director

#### INVESTMENTS



Ronald D. Schmitz Chief Investment Officer

#### INTERNAL AUDIT



Franklin O. Berry Internal Audit Director

# Investment Advisory Committee

MEMBER	TERM EXPIRES
Rod Smyth Chairman	5/17/2013
Chief Investment Strategist	As Chair:
Riverfront Investment Group	2/19/2013
Hance West Vice Chairman Managing Director Investure	12/31/2013
Thomas S. Gayner President and Chief Investment Officer Markel Corporation	2/19/2013
Joe Grills Former Chief Investment Officer IBM Retirement Funds	6/17/2014
<b>Deborah Allen Hewitt, Ph.D.</b> Clinical Professor The College of William and Mary	10/17/2014
Lawrence E. Kochard, Ph.D. Chief Executive Officer and Chief Investment Officer University of Virginia Investment Management Company	2/17/2013



SEATED FROM LEFT: Hance West, Deborah Allen-Hewitt, Erwin H. Will, Jr., and Joe Grills. STANDING FROM LEFT: Thomas S. Gayner and Rod Smyth.

MEMBER	TERM EXPIRES
<b>Donald W. Lindsey</b> Chief Investment Officer The George Washington University	3/31/2014
Erwin H. Will, Jr. Chief Investment Officer (Retired) Virginia Retirement System President (Retired) Capitoline Investment Services	5/17/2013

#### Executive Administrative Team

Robert P. Schultze

Director

Franklin O. Berry

Internal Audit Director

L. Farley Beaton, Jr. Chief Technology Officer Patricia S. Bishop

**Deputy Director** 

Jeanne L. Chenault

Director of Public Relations

Cynthia W. Comer

Director of Policy,
Planning and Compliance

Barry C. Faison

Chief Financial Officer

LaShaunda B. King

**Executive Assistant** 

Kenneth C. Robertson, Jr.

Director of Human Resources

#### **Executive Investment Team**

Ronald D. Schmitz

Chief Investment Officer

John P. Alouf, CFA

Director of Private Equity

Charles W. Grant, CFA

Director of Strategic Initiatives

John T. Grier, CFA

Director of Internal Equity

Field H. Griffith, CFA
Director of Real Assets

Steven C. Henderson, CFA

Director of Fixed Income

Kenneth C. Howell, CFA

Director of Global Equity

Curtis M. Mattson, CPA

Chief Administrative Officer

Stephen R. McClelland, CFA

**Director of Credit Strategies** 

Steven P. Peterson, Ph.D.

Director of Research

#### Professional Consultants

ACTUARY

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA

Chief Executive Officer Cavanaugh Macdonald Consulting, LLC

AUDITOR

Walter J. Kucharski, CPA

Auditor of Public Accounts Commonwealth of Virginia COMMONWEALTH OF VIRGINIA DEFERRED COMPENSATION PLAN Wendy Young-Carter ING

COMMONWEALTH OF VIRGINIA VOLUNTARY GROUP LONG TERM CARE INSURANCE PROGRAM

Rhonda Todd

Genworth Life

MASTER CUSTODIAN

BNY Mellon

LEGAL COUNSEL

Office of the Attorney General

Commonwealth of Virginia

VIRGINIA SICKNESS AND
DISABILITY PROGRAM

Michelle Jackson

Unum

LIFE INSURANCE CARRIER

Joseph K. W. Chang

Minnesota Life Insurance Company

#### Letter of Transmittal



Robert P. Schultze, Director Barry C. Faison, Chief Financial Officer

P.O. Box 2500 • 1200 East Main Street Richmond, Virginia 23218-2500 Toll Free: 1-888-VARETIR (827-3847) • TDD: (804) 289-5919

December 4, 2012

#### To the Members of the Board of Trustees:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the Virginia Retirement System (the System) for the fiscal year ended June 30, 2012. In addition to the Introductory Section, the System's CAFR contains a Financial Section, Investment Section, Actuarial Section and Statistical Section.

VRS' Comprehensive Annual Report for FY 2012 has been prepared in accordance with Section 51.1-1003 of the *Code of Virginia* (1950), as amended, which requires every retirement system to publish an annual report, and Section 4-10.00 of Chapter 2 of the 2012 Special Session I Virginia Acts of Assembly, which requires an annual detailed statement of financial condition. The report has been mailed to the Governor, the members of his Cabinet and the members of the Virginia General Assembly. The report also is available on the VRS website at *www.varetire.org*.

#### **VRS Overview**

VRS administers benefits and services for approximately 600,000 members, retirees and beneficiaries covered under the following systems:

- Virginia Retirement System (VRS) for teachers, state employees and employees of participating political subdivisions, including full-time local law enforcement officers, firefighters, emergency medical technicians and jail officers
- State Police Officers' Retirement System (SPORS)
- Virginia Law Officers' Retirement System (VaLORS)
- Judicial Retirement System (JRS)

#### Benefits administered by the System include:

- Plan 1 and Plan 2 defined benefit plans for members of VRS, SPORS, VaLORS and JRS
- Plan 1 and Plan 2 optional retirement defined contribution plans for political appointees, school superintendents and faculty members at Virginia's public colleges and universities, as elected by the participant
- Commonwealth of Virginia 457 Deferred Compensation and Cash Match Plans
- Group Life Insurance Program
- Retiree Health Insurance Credit Program
- Virginia Sickness and Disability Program (VSDP) and VSDP Long-Term Care Plan
- Commonwealth of Virginia (COV) Voluntary Group Long Term Care Insurance Program

More than 800 employers participate in VRS on behalf of their employees. They include state agencies, public colleges and universities, school boards, political subdivisions and special authorities.

### Fiduciary Responsibility of the Board

The VRS Board of Trustees (the Board) has full power to invest and reinvest the trust funds of the System. To fulfill its responsibility, the Board has adopted various investment policies and guidelines. The Board's investment objective for the VRS portfolio is to maximize long-term investment returns while targeting an acceptable level of risk. Primary risk measures are volatility in the plan's assets, funded status and contribution rates. As set forth in Section 11 of Article X of the *Constitution of Virginia*, the funds of the retirement system shall be deemed separate and independent trust funds; shall be segregated from all other funds of the Commonwealth; and shall be invested and administered solely in the interests of members, retirees and beneficiaries. The Board retains a professional investment staff, as well as outside managers, to advise and assist in the implementation of these policies and objectives.

The assets of the System are invested in a prudent manner that is intended to provide for the anticipated growth of VRS' pension liability. Section 51.1-124.30(C) of the *Code of Virginia* states that ". . . the Board shall invest the assets of the Retirement System with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims." Accordingly, the Board must sufficiently diversify the portfolio to minimize the risk of large losses unless, under the circumstances, it is clearly prudent not to do so.

#### Accounting System and Internal Control

The financial statements included in the CAFR for FY 2012 are the responsibility of the System's management and have been prepared in accordance with generally accepted accounting principles (GAAP) for governmental accounting and reporting under the Governmental Accounting Standards Board (GASB) and the Financial Accounting Standards Board (FASB).

The accrual basis of accounting is used in the preparation of the financial statements. Revenues are taken into account when they are earned and become measurable; expenses are recorded when the liabilities are incurred. Investments are reported at fair value as determined by the System's master custodian. Capital assets are recorded at cost and depreciated over their estimated useful life. Contributions to the System are based on the principle of level cost funding and are developed using the entry age normal cost method with current service financed on a current basis and prior service amortized within a period of 30 years or less. In management's opinion, the financial statements fairly present the plan net assets of the System at June 30, 2012 and the changes in its plan net assets for the period then ended.

GASB Statement Number 34 requires the System to include additional information in the CAFR. This information is provided in Management's Discussion and Analysis (MD&A) and includes an introduction as well as an overview and analysis of the System's financial activities for the current fiscal year and the two preceding years. The Letter of Transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found in the Financial Section immediately following the report of the independent auditor.

#### **VRS Milestones**

1908 Retired Teachers Fund created

1942 Virginia Retirement System (VRS) created for teachers and state employees

**1944** Political subdivisions have the option to join VRS

1950 State Police Officers'
Retirement System (SPORS)
created

**1960** Group Life Insurance Program created

1970 Cost-of-Living Adjustment (COLA) established; Judicial Retirement System (JRS) The System's management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with GAAP. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits that are likely to be derived from that control. The internal control system includes the organization plan; the appropriate segregation of duties and responsibilities and sound practices in the performance of duties; and personnel with capabilities commensurate with their responsibilities. The System also has an internal audit program that reports to the Audit Committee of the Board of Trustees, and the budget for the System's administrative expenses is approved by the Board and appropriated by the General Assembly of Virginia.

The retirement funds held by the System are constitutionally established as independent trust funds dedicated to the exclusive benefit of its members, retirees and beneficiaries. In management's opinion, the internal controls in effect during the fiscal year ended June 30, 2012 adequately safeguard the System's assets and provide reasonable assurance regarding the proper recording of financial transactions.

#### **Funding**

#### PENSION PLANS

The System's most recent actuarial valuation for the pension plans was prepared as of June 30, 2011. As expected, the report indicated a decline in the funded ratios for all of the plans. This decline resulted from the continued impact of the negative investment returns in FY 2009 on the Actuarial Value of Assets and the reduction in the assumption for the investment rate of return from 7.50% to 7.00%. The VRS, SPORS, VaLORS and JRS plans were actuarially funded at 69.9%, 62.6%, 55.0% and 65.2%, respectively, based on the actuarial valuation as of June 30, 2011. For the VRS, SPORS, VaLORS and JRS plans, this was a decrease from their funded ratios of 72.4%, 66.8%, 58.6% and 66.5%, respectively, based on the June 30, 2010 actuarial valuation. There were no changes in the primary actuarial assumptions for salary growth or inflation. Further information on this valuation is included in the Financial Section and the Actuarial Section of the CAFR.

Contributions for FY 2012 were based on the June 30, 2009 actuarial valuation. The rates certified by the VRS Board of Trustees for all state employee groups and for teachers were not fully funded by the Governor and General Assembly. However, the actual rates paid in FY 2012 for all groups reflected an increase over the FY 2011 levels. Retirement contribution rates are discussed in further detail in the Financial Section of the CAFR.

#### **VRS Milestones**

**1990** Health Insurance Credit for state retirees established

1992 Health Insurance Credit for retired teachers and political subdivision employees established

**1995** Optional Group Life Insurance Program established

1999 Virginia Sickness and
Disability Program (VSDP) for
state employees established;
Virginia Law Officers'
Retirement System (VaLORS)
created

**2002** VSDP Long-Term Care Plan established

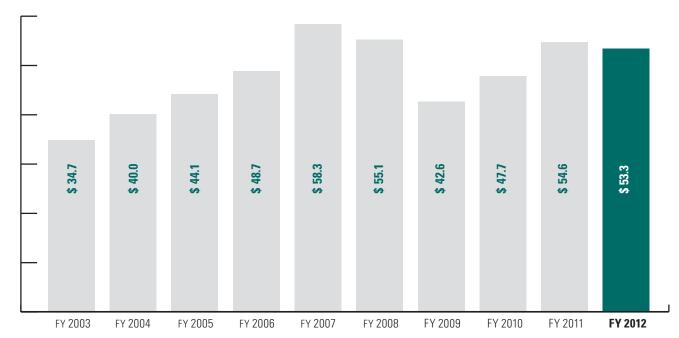
**2010** VRS Plan 2 created for members hired or rehired on or after July 1, 2010

#### OTHER POST-EMPLOYMENT BENEFITS PLANS

The System's most recent actuarial valuation for the Other Post-Employment Benefit (OPEB) plans was prepared as of June 30, 2011. As expected, the funded ratios for these plans generally declined. This decline resulted from the continued impact of the negative investment returns in FY 2009 on the Actuarial Value of Assets and the reduction in the assumption for the investment rate of return from 7.50% to 7.00%.

#### PLAN NET ASSETS AVAILABLE FOR BENEFITS

AS OF JUNE 30 (EXPRESSED IN BILLIONS)



The Group Life Insurance Fund, the Retiree Health Insurance Credit Fund and the Disability Insurance Trust Fund were actuarially funded at 36.1%, 9.7% and 124.6%, respectively, based on the actuarial valuation as of June 30, 2011. For the Group Life Insurance Fund and the Retiree Health Insurance Credit Fund, this was a decrease from their funded ratios of 41.4% and 13.0%, respectively, based on the June 30, 2010 actuarial valuation. For the Disability Insurance Trust Fund, there was a slight improvement from the funded ratio of 108.0% at June 30, 2010. There were no changes in the primary actuarial assumptions for salary growth or inflation. Further information on this valuation is included in the Financial Section and the Actuarial Section of the CAFR.

Contributions for FY 2012 were based on the June 30, 2009 actuarial valuation. The rates certified by the VRS Board of Trustees for the OPEB plans were not fully funded by the Governor and General Assembly. Contribution rates for each of these OPEB plans are discussed in further detail in the Financial Section of the CAFR.

#### Investments

At June 30, 2012, the total value of the VRS investment portfolio was \$53.5 billion, a decrease from the investment balance of \$55.6 billion at June 30, 2011. The decrease in the portfolio resulted from a decrease in the investment return, which was 1.4% for FY 2012, and an increase in benefit payments during the year. This decline was partially offset by slightly higher contributions. The System's net assets available for benefits at June 30, 2012 totaled \$53.3 billion, a decrease from the net asset balance of \$54.6 billion at June 30, 2011.

#### Legislative Initiatives

During the 2012 session, the Virginia General Assembly enacted the following bills that affect public employees and retirees covered under VRS.

#### **Emergency Clause Bills Effective Before July 1, 2012**

HOUSE BILL 140 – MANDATORY RETIREMENT AGE. Removed mandatory retirement at age 70 for regional jail and jail farm superintendents.

#### HOUSE BILL 350 - MILITARY DISABILITY FOR THE VIRGINIA SICKNESS AND DISABILITY PROGRAM.

Removed the military disability benefit as an offset for the Virginia Sickness and Disability Program (VSDP). Clarified that, consistent with legislation enacted in 2009, new employees participating in VSDP who have less than five years of continuous state service are limited to a maximum work-related benefit of 60% of their pre-disability compensation when placed on short-term disability.

#### **Pension Reform Legislation Effective July 1, 2012**

SENATE BILL 497 – POLITICAL SUBDIVISION AND SCHOOL BOARD MEMBER CONTRIBUTIONS. School division and political subdivision employees whose employers currently pay all or part of the 5% member contribution on their behalf began paying the member contribution effective July 1, 2012 on a salary reduction basis. Employers had the option to elect to phase in the amount the employee pays at a minimum of 1% in each of the next five years. The bill provided for an offsetting salary increase in the amount the employee began paying on July 1. All Plan 1 and Plan 2 employees hired or re-employed on or after July 1, 2012 must pay the entire 5% member contribution with no phase-in option.

#### **Pension Reform Legislation Effective January 1, 2013**

HOUSE BILL 1130/SENATE BILL 498 - DEFINED BENEFIT RETIREMENT PLAN CHANGES

#### DEFINED BENEFIT PLAN FEATURE

#### **Average Final Compensation**

Average final compensation, as part of the retirement benefit calculation, will be based on the average of the employee's 60 consecutive months of highest compensation as a covered employee.

#### MEMBER GROUP

# Applies to the following Plan 1 employees who will not be vested on January 1, 2013:

- General state employees, school division employees and general political subdivision employees
- Employees covered under the State Police Officers'
  Retirement System (SPORS) and the Virginia Law Officers'
  Retirement System (VaLORS), and political subdivision
  employees who have enhanced hazardous duty coverage
- Judges

This provision already applies to Plan 2 members.

**Exempt:** Plan 1 members who will be vested by January 1, 2013.

#### HOUSE BILL 1130/SENATE BILL 498 - DEFINED BENEFIT RETIREMENT PLAN CHANGES, cont.

#### DEFINED BENEFIT PLAN FEATURE

#### **Retirement Multiplier**

The retirement multiplier for service retirement will be 1.65% for service earned, purchased or granted on or after January 1, 2013. Service earned, purchased or granted before this date will come under the current 1.7% multiplier in calculating the retirement benefit.

The retirement multiplier for disability retirement will be 1.65% on all service, regardless of when it was earned, purchased or granted.

#### MEMBER GROUP

#### Applies to:

- Plan 1 general state employees, school division employees and general political subdivision employees who will not be vested on January 1, 2013
- All vested and non-vested Plan 2 general state employees, school division employees and general political subdivision employees
- Judges appointed or elected to an original term on or after January 1, 2013. The 1.65% multiplier applies to judges for both service and disability retirement, regardless of when service was rendered.

#### **Exempt:**

- Plan 1 members who will be vested by January 1, 2013
- Employees covered under SPORS and VaLORS, and political subdivision employees who have enhanced hazardous duty coverage
- Judges appointed or elected to an original term before January 1, 2013

#### **Earliest Retirement Eligibility Dates**

For unreduced retirement: Normal Social Security retirement age with at least five years of service credit or when age and service equal 90. *Example:* Age 60 with 30 years of service credit.

For reduced retirement: Age 60 with at least five years of service credit.

**Applies to:** Plan 1 general state employees, school division employees and general political subdivision employees who will not be vested on January 1, 2013. This provision already applies to Plan 2 members.

#### **Exempt:**

- Plan 1 members who will be vested by January 1, 2013
- Employees covered under SPORS and VaLORS, and political subdivision employees who have enhanced hazardous duty coverage
- Judges (no change to current age/service provisions)

#### **Purchase of Prior Service**

If purchased within the eligibility period, the cost for each year of service will be based on an approximate normal cost rate. Approximate normal cost is the average cost of one year of VRS service credit.

# Applies to the following Plan 1 employees who will not be vested on January 1, 2013:

- General state employees, school division employees and general political subdivision employees
- Employees covered under SPORS and VaLORS, and political subdivision employees who have enhanced hazardous duty coverage
- Judges

This provision already applies to Plan 2 members.

**Exempt:** Plan 1 members who will be vested by January 1, 2013.

#### HOUSE BILL 1130/SENATE BILL 498 - DEFINED BENEFIT RETIREMENT PLAN CHANGES, cont.

#### DEFINED BENEFIT PLAN FEATURE

#### **Cost-of-Living Adjustment (COLA) Effective Date**

For members who retire with a reduced benefit with less than 20 years of service credit, the COLA will go into effect on July 1 after one full calendar year following their unreduced retirement eligibility date.

This provision does not apply to disability retirement or involuntary separation from employment.

#### **COLA Calculation**

The COLA calculation will change to a maximum COLA of 3% in retirement.

#### MEMBER GROUP

**Applies to:** All vested and non-vested Plan 1 and Plan 2 employees, including employees covered under JRS, SPORS and VaLORS and political subdivision employees who have enhanced hazardous duty coverage.

**Exempt:** Employees who will be within five years of qualifying for an unreduced benefit on January 1, 2013. *Note:* The COLA for members retiring with an unreduced benefit or with a reduced benefit with at least 20 years of service credit will go into effect on July 1 after one full calendar year from the actual date they retire.

**Applies to:** Plan 1 employees who will not be vested on January 1, 2013 and all vested and non-vested Plan 2 employees, including employees covered under JRS, SPORS and VaLORS and political subdivision employees who have enhanced hazardous duty coverage.

**Exempt:** Plan 1 members who will be vested by January 1, 2013.

#### **Pension Reform Legislation Effective January 1, 2014**

HOUSE BILL 1130/SENATE BILL 498 – MANDATORY HYBRID RETIREMENT PLAN. Any employee who is hired for the first time in a covered position, with no VRS service credit, on or after January 1, 2014 will be enrolled in a new mandatory hybrid retirement plan. This legislation includes judges appointed or elected to an original term on or after January 1, 2014. Members of SPORS and VaLORS, and political subdivision employees who have enhanced hazardous duty coverage, are exempt from this bill. A hybrid retirement plan combines the features of a defined benefit plan and a defined contribution plan. Current members in Plan 1 and Plan 2 may elect to transfer to the hybrid retirement plan during a one-time 120-day election period after January 1, 2014. This will be an irrevocable election.

#### Other Bills Effective July 1, 2012

HOUSE BILL 438 – DISABILITY RETIREMENT AND LOCAL HAZARDOUS DUTY EMPLOYEES. Provided that local employees with at least five years of service credit in an enhanced hazardous duty position who become disabled and are unable to return to a hazardous duty position may, at the employer's option, accept a non-hazardous duty position at a salary not less than that of the previous hazardous duty position with the same employer. The employee will continue to receive enhanced hazardous duty coverage in this position.

#### HOUSE BILL 791 - NEW PURCHASE OF PRIOR SERVICE CATEGORY/OTHER BENEFIT AMENDMENTS

- An employee who was not reported to VRS while receiving a workers' compensation benefit may purchase up to 24 months of this service while actively employed.
- Group life insurance will begin to reduce for a disability retiree on January 1 following the first full year from the date the retiree reaches normal retirement age.

- Optional life insurance may continue for disability retirees until the end of the month in which they reach normal retirement age. However, if the disability retiree was insured for at least 60 continuous months before reaching normal retirement age, he or she can continue the coverage, but it will begin to reduce.
- Adds members of the University of Virginia Medical Center optional retirement plan who have a deferred
  member account balance in the VRS defined benefit plan to those who are allowed to transfer their
  defined benefit member account balance to their ORP account. Service accrued in the defined benefit
  plan also will count toward eligibility for the health insurance credit.
- Clarifies the current policy that members who die while on active military duty will be treated as a death in service.

HOUSE BILL 792 – DEFERRED COMPENSATION PLAN AUTO ENROLL. Political subdivisions that participate in the VRS deferred compensation plan as well as those that offer their own deferred compensation plans can elect to have new employees auto-enrolled in the plan upon employment or re-employment. Employees have the option to opt-out of the plan.

SENATE BILL 171 – BENEFITS FOR HAZARDOUS DUTY EMPLOYEES. Allowed political subdivisions that have not elected enhanced coverage for hazardous duty employees to provide firefighters, emergency medical technicians or law enforcement officers hired on or after July 1, 2010 with the age and service requirements for retirement applicable to employees hired before July 1, 2010. Political subdivisions that wish to adopt this provision must submit a resolution to VRS documenting this election. This is an irrevocable election.

#### Line of Duty Act Bills Effective July 1, 2012

HOUSE BILL 42/SENATE BILL 424 – LINE OF DUTY DECEASED PERSON DEFINITION. Codified existing language in the Appropriation Act that the Line of Duty Act definition of a deceased person will include fire companies or departments that provide fire protection services to Virginia National Guard or Virginia Air National Guard facilities.

HOUSE BILL 395/SENATE BILL 441 – BURIAL EXPENSE FOR LINE OF DUTY DEATH. Codified existing language in the Appropriation Act that the state comptroller may advance beneficiary payments to a funeral service provider to pay burial and transportation costs for an employee who dies in the line of duty.

#### HOUSE BILL 1134 - LINE OF DUTY DECEASED PERSON DEFINITION.

The Line of Duty Act definition of a deceased person will include any full-time sworn member of the Department of Motor Vehicles enforcement division.

**Budget Bill Effective July 1, 2012** – RETIREMENT CONTRIBUTION RATE OPTIONS FOR LOCALITIES AND SCHOOL DIVISIONS. Provided localities and school divisions the option to pay (1) the contribution rate certified by the VRS Board of Trustees for the next biennium; or (2) either their current rate certified by the VRS Board for FY 2011-2012 or 70% of the certified rate for FY 2012-2014, whichever is higher.



# **30 Years of Excellence in Financial Reporting.** The VRS Comprehensive Annual Financial Report for FY 2011 marked the 30th year of recognition from the Government Finance Officers Association of the United States and Canada (GFOA) for excellence in financial reporting.

#### Year in Review

MEMBER AND RETIREE HIGHLIGHTS. The total VRS membership increased from 600,972 members, retirees and beneficiaries in fiscal year 2011 to 616,009 in fiscal year 2012, representing an increase of 2.50%. The following are highlights from the fiscal year:

- The number of active VRS members increased 0.6%, from 339,740 to 341,826.
- The number of retirees and beneficiaries increased 4.2%, from 156,165 to 162,751.

- VRS paid \$3,401.8 million in retirement benefits in FY 2012, compared to \$3,263.9 million during FY 2011.
- The number of inactive and deferred members increased 6.1%, from 105,067 to 111,432.
- More than 72,560 members held accounts through the Commonwealth of Virginia 457 Deferred Compensation Plan at the end of the fiscal year. Of these participants, more than 67,840 received a cash match through the Virginia Cash Match Plan.

EXEEDING BENCHMARKS. VRS personnel continued to satisfy or exceed benchmarks for operating standards, as the following highlights show:

OPERATING STANDARDS	BENCHMARK	FY 2012 RESULT
Retiree Payroll (benefits paid each month to retirees and other annuitants)	100.0% of all monthly payrolls run no later than the first day of the month.	100.0% of monthly payrolls ran on time.
Customer Counseling Center Abandoned Call Rate (rate of incoming calls going unanswered)	The average abandoned call rate does not exceed 5.0%.	The average rate was 1.6%.
Service Retirements	Service retirement applications are processed in an average of 60 days with a 95.0% accuracy rate.	Service retirement applications were processed in an average of 26 days with a 99.9% accuracy rate.
Disability Retirements	98.0% of disability retirement applications are processed within 40 days of approval by the VRS Medical Board.	98.8% of disability retirement applications were processed within 18 days of approval by the VRS Medical Board.
Purchase of Prior Service	Cost letters sent to members applying to purchase prior service are processed within 30 days of receiving a completed application with a 95.0% accuracy rate.	Cost letters were processed within 11 days with a 100.0% accuracy rate.
Refunds	95.0% of requests for refunds of member contributions are processed within 60 days.	99.9% of refunds were processed within eight days.
Benefit Estimates	90.0% of requests for benefit estimates are completed within 30 days.	95.6% of estimates were completed within 16 days.

OPERATING STANDARDS, cont.	BENCHMARK	FY 2012 RESULT
Employer Reports	96.0% of reports submitted to VRS by employers are processed within 30 days.	99.5% of employer reports were processed within 30 days.
Workflow Imaging	95.0% of documents VRS receives are imaged and available to customer service and operations personnel within 24 hours.	100.0% of documents were imaged and available within 24 hours.
System Availability	The system is available for all critical business functions 99.0% of the time.	The system was available 100.0% of the time.

In addition to these achievements, VRS staff provided counseling, education, workshops and training opportunities for members and employers throughout the state:

- The Member Counseling Team assisted more than 2,400 members in one-on-one counseling sessions and responded to more than 6,300 emails. Staff also conducted 219 retirement education and group counseling sessions, special presentations, videoconferences, webinars and benefit fairs, reaching approximately 9,500 members around the state.
- VRS' Employer Representatives made more than eight site visits and held 16 workshops in locations around the state, attended by more than 158 employer contacts. In addition, the Employer Representatives assisted five new employers joining VRS; four employers adding enhanced coverage for hazardous duty employees; one employer adding an enhanced retirement multiplier for hazardous duty employees; three employers electing the health insurance credit; seven employers adopting defined contribution plans; one employer electing the Virginia Cash

- Match Plan; one employer electing the Group Life Insurance Program; and one employer picking up the Optional Retirement Plan for School Superintendents.
- The Employer Training Team provided 14 sessions for more than 685 human resource and payroll officers during FY 2012.
- During the fiscal year, there were approximately 1.8 million visits to the VRS website at www. varetire.org, reflecting an increase of nearly 10% over the previous June 30. Except for the homepage, myVRS, the secure online system, led in page views as a top destination.
- The number of subscribers to the online *Employer Update* newsletter increased almost 10%, from 2,000 in FY 2011 to 2,215 in FY 2012. With an average "open rate" of more than 40%, VRS nearly doubled the industry standard open rate.



#### **Innovations**

VRS PREPARES FOR LAUNCH OF myVRS

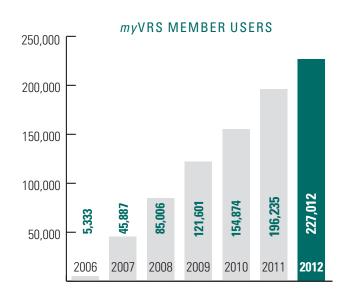
NAVIGATOR. As of June 30, 2012, VRS had set in motion the final stages of Phase 3 of the VRS Modernization Program, leading to the November 5, 2012 launch of *my*VRS Navigator for VRS-participating employers. With *my*VRS Navigator, employers can now submit new enrollments and employee updates online on a continuous basis and send contribution payments electronically, providing more timely updating and streamlined access.

Key activities during FY 2012 included preparing for the conversion of approximately 14.2 million records in the current system to myVRS Navigator as well as gathering new data from employers; intensive testing of myVRS Navigator using real business scenarios; establishing an out-of-state disaster recovery site to house standby systems critical to VRS; and implementing a new imaging system, which involved converting more than 10 million images from the existing imaging system to the format required by myVRS Navigator. In addition, VRS provided training for staff and participating employers, which will continue to be available to them as they become proficient in using the new system.

Phase 4 of the VRS Modernization Program will open *my*VRS Navigator to members where they will be able to retire online and conduct more online transactions than are currently available to them. Planning and implementation of Phase 4 will resume after implementation of pension reform and continue over the next several years.

myVRS CONTINUES TO ATTRACT USERS. During the fiscal year, the secure online myVRS system continued to serve as a valuable resource for members, retirees and employers:

- By June 30, 2012, 30,715 members had registered for *my*VRS, bringing the total of registered members to 227,021 in FY 2012, an increase from the 196,235 registered members in FY 2011.
- Members put myVRS planning tools to good use during the fiscal year, creating more than 281,000 estimates through the myVRS Benefit Estimator and just under 40,000 Quick and Detailed Plans through the myVRS Retirement Planner.
- Since 2008, when myVRS was opened to retirees, 45,325 retirees have created online accounts.
   Retirees completed more than 2,800 income tax transactions through the myVRS retiree tax tool during the fiscal year.
- By June 30, 2012, more than 1,600 participating employer contacts authorized to access member information had registered for myVRS for Employers. During the fiscal year, employers created more than 87,000 benefit estimates to help counsel employees getting ready to retire.



#### Acknowledgements

VRS' mission calls on us to provide the best service possible and to be responsible stewards of the funds in our care on behalf of our members, retirees and beneficiaries. This report provides complete and reliable information that supports management's decisions in carrying out this mission. Responsible stewardship, however, is more than sound management. It also encompasses the outstanding commitment of VRS staff to excellence, the support of VRS' affiliated employers and business partners and the guidance and dedication of the Board of Trustees. We would like to express our sincere thanks and appreciation to each of these exceptional individuals and representatives.

Finally, we wish to thank Governor Robert F. McDonnell and the members of the Virginia General Assembly for their continued commitment to the financial security of the members, retirees and beneficiaries of the Virginia Retirement System.

Respectfully submitted,

Robert P. Schultze

Director

Barry C. Faison Chief Financial Officer



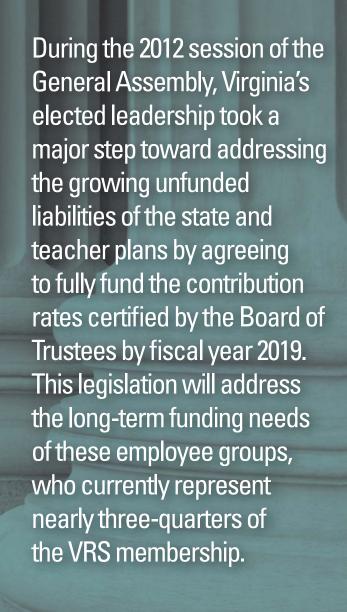
# financial section

Management's Discussion and Analysis **Basic Financial Statements:** Statement of Plan Net Assets Statement of Changes in Plan Net Assets Notes to Financial Statements: Schedule of Funding Progress—Pension Plans Schedule of Actuarial Methods and Significant Assumptions—Pension Plans Schedule of Funding Progress-Other Post-**Employment Benefit Plans** Schedule of Actuarial Methods and Significant Assumptions-Other Post-Employment Benefit Plans Required Supplemental Schedule of Funding Progress—Pension Plans Required Supplemental Schedule of Employer Contributions—Pension Plans Required Supplemental Schedule of Funding Progress—Other Post-Employment Benefit Plans Required Supplemental Schedule of Employer Contributions—Other Post-Employment **Benefit Plans** Schedule of Administrative Expenses Schedule of Professional and Consulting Services

Independent Auditor's Report



Schedule of Investment Expenses



Partners
Building the
Huture

Cost savings associated with pension reform can ease the financial burden on state and school employers only so far. By authorizing the full funding of the Board-certified rates over the next several years, the General Assembly assumed a greater partnership role in building the future of the System.



# Commonwealth of Virginia

Auditor of Public Accounts

Walter J. Kucharski Auditor of Public Accounts P.O. Box 1295 Richmond, Virginia 23218

November 26, 2012

The Honorable Robert F. McDonnell Governor of Virginia

The Honorable John M. O'Bannon, III Chairman, Joint Legislative Audit And Review Commission

Board of Trustees Virginia Retirement System

#### INDEPENDENT AUDITOR'S REPORT ON FINANCIAL STATEMENTS

We have audited the accompanying basic financial statements of the **Virginia Retirement System** as of and for the year ended June 30, 2012, as listed in the table of contents. These financial statements are the responsibility of the Virginia Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year summarized comparative information has been derived from the Virginia Retirement System's 2011 financial statements, and in our report dated November 30, 2011, we expressed an unqualified opinion on the respective financial statements of the Virginia Retirement System.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As discussed in Note 1, the basic financial statements of the Virginia Retirement System are intended to present the financial position and the changes in financial position of only that portion of the aggregate remaining fund information of the Commonwealth of Virginia that is attributable to the transactions of the Virginia Retirement System. They do not purport to, and do not, present fairly the Commonwealth of Virginia's overall financial position as of June 30, 2012, and the changes in its financial position and its cash flows, where applicable for the year then ended in conformity with accounting principles generally accepted in the United States of America.

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In our opinion, the financial statements referred to previously present fairly, in all material respects, the plan net assets of the Virginia Retirement System as of June 30, 2012, and the changes in plan net assets for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, funding progress, and employer contributions on pages 29 through 39 and 84 through 87 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audit was conducted for the purpose of forming an opinion on the financial statements of Virginia Retirement System. The introductory, investment, actuarial, and statistical sections, and the schedules of administrative expenses, professional and consulting services, and investment expenses are presented for the purpose of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The schedule of administrative expenses, professional and consulting services, and investment expenses in the financial section have been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of administrative expenses, professional and consulting services, and investment expenses are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

In accordance with Government Auditing Standards, we have also issued our report dated November 26, 2012 on our consideration of the Virginia Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

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he Virginia Retirement System administers pension and other employee benefit plans for approximately 600,000 members, retirees and beneficiaries. The purpose of the Financial Section is to present the plans' net assets and changes in net assets for the fiscal year through the audited Basic Financial Statements. In support of this information, the Financial Section includes Management's Discussion and Analysis of activity affecting the plans and the operations of the System during the current and previous fiscal years. It also includes the Notes to Financial Statements, providing additional detail about the statements, as well as required schedules regarding historical information and the administration of the plans.

#### Management's Discussion and Analysis (Unaudited)

Management's Discussion and Analysis provides highlights of the funding of the plans and the performance and operations of the Virginia Retirement System (the System) for the fiscal year ended June 30, 2012. The information provided in the Introductory, Investment, Actuarial and Statistical sections complements this discussion.

The System administers two defined benefit retirement plans, Plan 1 and Plan 2, through the following systems. These are defined as pension trust funds:

- Virginia Retirement System (VRS) for state employees, teachers, other eligible school division employees, employees of participating political subdivisions and other qualifying employees
- State Police Officers' Retirement System (SPORS) for state police officers
- Virginia Law Officers' Retirement System (VaLORS) for Virginia law officers other than state police officers
- Judicial Retirement System (JRS) for judges of state courts of record, state district courts and other qualifying employees.

The System also administers the Group Life Insurance Fund, Retiree Health Insurance Credit Fund, Disability Insurance Trust Fund and the funding of the Line of Duty Act Trust Fund, which are defined as other employee benefit trust funds. Both the pension and other employee benefit trust funds are classified as fiduciary funds.

#### FINANCIAL HIGHLIGHTS

- The combined total net assets held in trust for benefits of the trust funds were \$53.3 billion at June 30, 2012, representing a decrease of \$1,253.1 million, or 2.3%, from the net assets held in trust as of June 30, 2011. The decrease was due to marginal investment returns and increased expenses for benefit payments.
- The System's rate of return on investments during the fiscal year ended June 30, 2012 was 1.4% compared to a return of 19.1% for the fiscal year ended June 30, 2011. The decrease is due primarily to the poor performance of the public equity investments in the portfolio.
- The VRS, SPORS, VaLORS and IRS plans were actuarially funded at 69.9%, 62.6%, 55.0% and 65.2%, respectively, based on the actuarial valuation as of June 30, 2011. For the VRS, SPORS, VaLORS and JRS plans, this was a decrease from their funded ratios of 72.4%, 66.8%, 58.6% and 66.5%, respectively, based on the June 30, 2010 actuarial valuation. There were no changes in the primary actuarial assumptions for salary growth or inflation. The funded ratios

of all the plans continue to reflect the impact of the investment losses recorded in FY 2009 on the Actuarial Value of Assets. The impact was lessened due to the positive impact of the net investment gains recorded in FY 2007, FY 2010 and FY 2011 because of the "five-year smoothing" asset valuation method used by the VRS actuary.

- The Group Life Insurance Fund, the Retiree Health Insurance Credit Fund and the Disability Insurance Trust Fund were actuarially funded at 36.1%, 9.7% and 124.6%, respectively, based on the actuarial valuation as of June 30, 2011. For the Disability Insurance Trust Fund, this was an increase from its funded ratio of 108.0% based on the June 30, 2010 actuarial valuation. For the Group Life Insurance Fund and the Retiree Health Insurance Credit Fund, there was a decrease from the June 30, 2010 funded ratios of 41.4% and 13.0%, respectively. There were no changes in the primary actuarial assumptions for salary growth or inflation. The funded ratios of all the plans continue to reflect the impact of the investment losses recorded in FY 2009 on the Actuarial Value of Assets. The impact was lessened due to the positive impact of the net investment gains recorded in FY 2007, FY 2010 and FY 2011 because of the "five-year smoothing" asset valuation method used by the VRS actuary.
- The Line of Duty Act Trust Fund was created effective July 1, 2010 as a new trust fund but had an actuarial valuation prepared as of June 30, 2010 to determine the initial actuarial accrued liability. The fund still has no assets, resulting in a funded ratio of zero (0.00%) for both June 30, 2011 and 2010.

#### Overview of the Financial Statements and Accompanying Information

BASIC FINANCIAL STATEMENTS. The System presents the Basic Financial Statements for the year ended June 30, 2012 with comparative information from the previous fiscal year. The statements were prepared on the accrual basis of accounting and are used to account

for the resources the System administers on behalf of plan members and beneficiaries. These statements include:

- Statement of Plan Net Assets-Defined Benefit Pension Trust Funds and Other Employee Benefit Trust Funds. This statement reflects the balance of the resources available to pay benefits to members, retirees and beneficiaries at the end of the fiscal year.
- Statement of Changes in Plan Net Assets-Defined Benefit Pension Trust Funds and Other Employee Benefit Trust Funds. This statement reflects the changes in the resources available to pay benefits to members, retirees and beneficiaries during the fiscal year.

A summary of the Basic Financial Statements is presented in Figures 2.1 and 2.2. The full statements follow Management's Discussion and Analysis.

NOTES TO FINANCIAL STATEMENTS. The Notes to Financial Statements provide detailed information and are integral to the Basic Financial Statements.

#### REQUIRED SUPPLEMENTARY SCHEDULES. These schedules include:

- Required Supplemental Schedule of Funding Progress-Pension Plans
- Required Supplemental Schedule of Employer Contributions-Pension Plans
- Required Supplemental Schedule of Funding Progress-Other Post-Employment Benefit Plans
- Required Supplemental Schedule of Employer Contributions-Other Post-Employment Benefit Plans

ADDITIONAL FINANCIAL INFORMATION. The following schedules provide additional information not included in the Basic Financial Statements:

- Schedule of Administrative Expenses
- Schedule of Professional and Consulting Services
- Schedule of Investment Expenses

#### FIGURE 2.1 - SUMMARY OF PLAN NET ASSETS

AT JUNE 30 (EXPRESSED IN MILLIONS)

	2012	Increase (Decrease)	2011	(	Increase Decrease)	2010
Assets:						
Cash, Receivables and Capital Assets Investments Security Lending Collateral	\$ 1,834.9 53,520.5 2,161.3	\$ (165.5) (2,112.7) (1,500.9)	\$ 2,000.4 55,633.2 3,662.2	\$	(765.1) 7,709.4 (421.9)	\$ 2,765.5 47,923.8 4,084.1
Total Assets	\$ 57,516.7	\$ (3,779.1)	\$ 61,295.8	\$	6,522.4	\$ 54,773.4
Liabilities:						
Accounts Payable Investment Purchases Payable Obligations Under Securities Lending	\$ 523.7 1,512.0 2,171.8	\$ (30.0) (1,000.0) (1,496.0)	\$ 553.7 2,512.0 3,667.8	\$	(532.9) 568.5 (424.3)	\$ 1,086.6 1,943.5 4,092.1
Total Liabilities	\$ 4,207.5	\$ (2,526.0)	\$ 6,733.5	\$	(388.7)	\$ 7,122.2
Total Net Assets	\$ 53,309.2	\$ (1,253.1)	\$ 54,562.3	\$	6,911.1	\$ 47,651.2

#### FIGURE 2.2 – SUMMARY OF CHANGES IN PLAN NET ASSETS

FOR THE YEARS ENDED JUNE 30

(EXPRESSED IN MILLIONS)

	2012	(	Increase Decrease)	2011	(	Increase Decrease)	2010
Additions:							
Member Contributions	\$ 231.0	\$	203.4	\$ 27.6	\$	(61.4)	\$ 89.0
Member Contributions Paid							
by Employer	560.5		(175.9)	736.4		(25.3)	761.7
Employer Contributions	1,134.8		245.3	889.5		(347.5)	1,237.0
Net Investment Income	646.6		(8,319.3)	8,965.9		2,542.7	6,423.2
Miscellaneous Revenue and Transfers	4.6		2.8	1.8		0.6	1.2
Total Additions	\$ 2,577.5	\$	(8,043.7)	\$ 10,621.2	\$	2,109.1	\$ 8,512.1
Deductions:							
Retirement Benefits	\$ 3,401.8	\$	137.9	\$ 3,263.9	\$	228.6	\$ 3,035.3
Refunds of Member Contributions	88.9		(11.6)	100.5		7.4	93.1
Insurance Premiums and Claims	139.9		(5.1)	145.0		7.2	137.8
Retiree Health Insurance							
Credit Reimbursements	131.1		4.6	126.5		6.2	120.3
Disability Insurance Benefits	28.4		0.2	28.2		0.6	27.6
Line of Duty Act Reimbursements	10.5		0.5	10.0		10.0	-
Administrative and Other Expenses	30.0		(6.0)	36.0		4.5	31.5
Total Deductions	\$ 3,830.6	\$	120.5	\$ 3,710.1	\$	264.5	\$ 3,445.6
Net Increase (Decrease) in							
Net Assets	\$ (1,253.1)	\$	(8,164.2)	\$ 6,911.1	\$	1,844.6	\$ 5,066.5

#### Analysis of Financial Activities – **Pension Plans**

The System's funding objective is to meet its longterm benefit obligations through investment income and contributions. Accordingly, the collection of contributions and the income from investments provide the reserves needed to finance the benefits provided under the plans.

#### MEMBERS, RETIREES, BENEFICIARIES AND EMPLOYERS

Approximately 341,826 active members were employed with 834 VRS-participating employers as of June 30, 2012. The number of retirees and other annuitants totaled approximately 162,751 at year end. The distribution of active members, retirees and beneficiaries, and employers is shown in Figures 2.3, 2.4 and 2.5.

FIGURE 2.3 - DISTRIBUTION OF ACTIVE MEMBERS

AT JUNE 30

	2012	2	201	1	2010		
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	
State Employees (VRS)	79,030	23.1%	78,392	23.1%	78,613	22.9%	
Teachers (VRS)	146,690	42.9%	145,707	42.9%	147,817	43.2%	
Political Subdivision Employees (VRS)	104,427	30.5%	103,902	30.6%	104,385	30.5%	
State Police Officers (SPORS)	1,886	0.6%	1,741	0.5%	1,766	0.5%	
Virginia Law Officers (VaLORS)	9,413	2.8%	9,604	2.8%	9,620	2.8%	
Judges (JRS)	380	0.1%	394	0.1%	408	0.1%	
Total Members	341,826	100.0%	339,740	100.0%	342,609	100.0%	

Additional information about the membership is presented in Note 2 and in the Statistical Section.

FIGURE 2.4 - DISTRIBUTION OF RETIREES AND BENEFICIARIES

AT JUNE 30

	201	2	201	1	2010		
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	
State Employees (VRS)	48,431	29.8%	47,286	30.3%	45,837	30.9%	
Teachers (VRS)	70,392	43.2%	67,408	43.2%	63,566	42.8%	
Political Subdivision Employees (VRS)	39,443	24.2%	37,325	23.9%	35,249	23.7%	
State Police Officers (SPORS)	1,161	0.7%	1,137	0.7%	1,100	0.7%	
Virginia Law Officers (VaLORS)	2,872	1.8%	2,571	1.6%	2,303	1.6%	
Judges (JRS)	452	0.3%	438	0.3%	441	0.3%	
Total Retirees and Beneficiaries	162,751	100.0%	156,165	100.0%	148,496	100.0%	

Additional information about retirees is presented in the Statistical Section.

FIGURE 2.5 - DISTRIBUTION OF EMPLOYERS

AT JUNE 30

	2012	2011	2010
Cities and Towns	162	161	160
Counties	93	93	93
School Boards*	144	144	144
Special Authorities	199	195	194
State Agencies	236	236	235
<b>Total Employers</b>	834	829	826

\*Of the 144 school boards, 134 also provide coverage for non-professional employees and are treated as political subdivisions. A list of VRSparticipating employers and additional employer information are presented in the Statistical Section.

#### CONTRIBUTIONS AND INVESTMENT EARNINGS

The retirement benefits provided by the plans are funded from pension trust fund revenue. As shown in Figure 2.6, the primary sources of revenue are contributions for active members made by members or their employers, contributions from employers and investment income generated from the investment of plan assets.

Total contributions and investment earnings for the year ended June 30, 2012 amounted to \$2,457.9 million. This was a decrease of \$7,803.2 million when compared with the activity for FY 2011 and also represents a decline from the contributions and investments earnings of \$8,095.5 million recorded in FY 2010.

Total member contributions increased by \$27.4 million. The portion members paid increased by \$203.3 million due primarily to an increase in the member-paid contributions for Plan 2 and the shift made July 1, 2011 for state employees from employer-paid to member-paid contributions.

For FY 2012, employer contributions increased by \$241.3 million due primarily to an increase in the employer contribution rate for teachers for the entire fiscal year and an increase in the employer contribution rate for state employees for the last quarter of the fiscal year. The total of all contributions represented an increase of \$268.7 million from FY 2011. Employer contributions for pensions are discussed further in Notes 2 and 12.

During FY 2011, the System experienced a reduction in total member contributions of \$24.1 million and a decrease in employer contributions of \$289.0 million. The decline in employer contributions was related primarily to the reduced employer contribution rates for state employees and teachers in place during the entire fiscal year. This decrease was partially offset by some payroll growth, the addition of some new local government employers and the election of enhanced hazardous duty or other coverage by some local governments.



FIGURE 2.6 – SUMMARY OF PENSION CONTRIBUTIONS, INVESTMENT EARNINGS AND MISCELLANEOUS REVENUES

FOR THE YEARS ENDED JUNE 30 (EXPRESSED IN MILLIONS)

	2012		icrease ecrease)		2011	Increase (Decrease)		2010
Member Contributions	\$ 231.0	\$	203.3	\$	27.7	\$ 1.2	\$	26.5
Member Contributions Paid by Employers	560.5		(175.9)		736.4	(25.3)		761.7
Employer Contributions	1,025.3		241.3		784.0	(289.0)		1,073.0
Net Investment Income	637.2	(	(8,074.4)		8,711.6	2,478.5		6,233.1
Miscellaneous Revenue and Transfers	3.9		2.5		1.4	0.2		1.2
Total Contributions, Investment Earnings and Miscellaneous Revenues	\$ 2,457.9	\$ (	(7,803.2)	\$	10,261.1	\$ 2,165.6	\$	8,095.5

#### INVESTMENTS

The System holds contributions from members and employers in a commingled pool, which is invested to provide for the payment of current and future benefits to members when they retire. Each plan–VRS, SPORS, VaLORS and JRS–owns an equity position in the pool and receives a proportionate share of the total investment income or loss from the pool.

As shown in Figure 2.6, there was net investment income for FY 2012 of \$637.2 million, which represented a decrease of \$8,074.4 million from FY 2011. This compares with the net investment income increase of \$2,478.5 million in FY 2011. Total pension trust fund investments were \$52,270.5 million at fair value at June 30, 2012. This was a decrease of \$1,890.9 million from the fair value of \$54,161.4 million at June 30, 2011.

The total pension trust fund investments increased in FY 2011 by \$7,656.9 million from their fair value of \$46,504.5 million at June 30, 2010. The total return on pension trust fund investments for the year

ended June 30, 2012 was 1.4%. This represents an annualized return of 11.3% over the past three years and 0.8% over the past five years. An explanation of investment policies and strategies as well as the portfolio's composition is included in the Investment Section. A review of investment activity and results for FY 2012 also is provided in that section.

# EXPENSES – DEDUCTIONS FROM PLAN NET ASSETS

As shown in Figure 2.7, the primary expenses of the pension trust funds include annuity benefits for retirees and beneficiaries, refunds of contributions to former members and expenses associated with the administration of the retirement plans. Expenses for FY 2012 totaled \$3,517.6 million, an increase of \$120.6 million, or 3.6%, over the 2011 period.

Benefit payments were \$3,401.8 million in FY 2012. This is an increase of \$137.9 million compared to an increase of \$228.6 million for FY 2011. The increase in FY 2012 was due to continued growth in the number of retirees and beneficiaries receiving benefits; however, this growth was not as significant as the growth in FY 2011. The FY 2012 benefit payments also reflect a 1.28% cost-of-living adjustment (COLA) effective July 1, 2011.

FIGURE 2.7 - SUMMARY OF PENSION PLAN PRIMARY EXPENSES

FOR THE YEARS ENDED JUNE 30 (EXPRESSED IN MILLIONS)

		2012	(	Increase Decrease)	2011	ncrease ecrease)	2010		
Benefits	\$	3,401.8	\$	137.9	\$ 3,263.9	\$ 228.6	\$ 3,035.3		
Refunds		88.9		(11.6)	100.5	7.4	93.1		
Administrative and Other Expenses		26.9		(5.7)	32.6	4.1	28.5		
Total Primary Expenses	\$	3,517.6	\$	120.6	\$ 3,397.0	\$ 240.1	\$ 3,156.9		

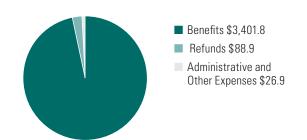
Refunds of contributions to members who terminated employment during FY 2012 amounted to \$88.9 million (9,670 refunds), compared with \$100.5 million refunded (13,221 refunds) during FY 2011 and \$93.1 million refunded (13,798 refunds) during FY 2010. The change during FY 2012 reflects a decrease in the volume of refunds but an increase in the average refund amount compared to FY 2011.

Administrative and other expenses for FY 2012 were \$26.9 million, compared with \$32.6 million for FY 2011 and \$28.5 million for FY 2010. Administrative and other expenses decreased by \$5.7 million for FY 2012. This compares to an increase in FY 2011 of \$4.1 million. The decrease for FY 2012 is primarily related to a decrease in the other expenses category, which includes investment income distributions to other accounts managed by the System. This decrease in administrative expenses reflects the System's ongoing costs associated with the Modernization Program, offset by increases in some other expense categories. Further details are provided in the Schedule of Administrative Expenses following the Required Supplemental Schedules.

#### PENSION PLAN ACTIVITY

FISCAL YEAR 2012

(EXPRESSED IN MILLIONS)



#### FIGURE 2.8 - SUMMARY OF PENSION PLAN RESERVE BALANCES

AT JUNE 30 (EXPRESSED IN MILLIONS)

	2012	Increase (Decrease)	2011	Increase (Decrease)	2010		
Member Reserves Employer Reserves	\$ 11,341.9 40,749.5	\$ 470.2 (1,529.9)	\$ 10,871.7 42,279.4	\$ 325.8 6,538.3	\$ 10,545.9 35,741.1		
Total Reserve Balances	\$ 52,091.4	\$ (1,059.7)	\$ 53,151.1	\$ 6,864.1	\$ 46,287.0		

These balances also reflect transfers between the Member and Employer Reserves for interest credited to member accounts and member contributions transferred to the Employer Reserve upon a member's retirement. For FY 2012, the amount of interest credited to member accounts was \$415.2 million, and the amount of member balances transferred to the Employer Reserve for retirements was \$647.8 million. For FY 2011, the interest and retirement transfers were \$397.4 million and \$734.0 million, respectively.

#### RETIREMENT RESERVES

The funds accumulated by the pension plans to meet current and future obligations to retirees and beneficiaries are derived from the excess of revenues over expenses. The higher the level of funding a plan achieves, the larger the accumulation of assets and the greater the investment income potential. As shown in Figure 2.8, expenses exceeded revenues for FY 2012, leading to a net decrease of \$1,059.7 million in the retirement reserves held by the plans. This follows an increase of \$6,864.1 million in the retirement reserves in FY 2011. The decrease for FY 2012 was related primarily to the investment performance for the year, which declined significantly from FY 2011.

# ACTUARIAL VALUATIONS AND FUNDING PROGRESS – PENSION PLANS

The System's actuarial firm performs actuarial valuations of VRS, SPORS, VaLORS and JRS at least every two years to determine funding requirements. The funding policy provides for periodic employer contributions at actuarially determined rates that will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the costs of all benefits when due.

According to the latest valuations of the pension plans performed by Cavanaugh Macdonald Consulting, LLC as of June 30, 2011, the ratio of assets accumulated by the plans to their total actuarial accrued liabilities for benefits was 69.9% for VRS, 62.6% for SPORS, 55.0% for VaLORS and 65.2% for JRS. The valuations reflect full prefunding of the statutory cost-of-living adjustment (COLA) for retirees.

Historical information for the pension plans is presented in the Required Supplemental Schedule of Funding Progress—Pension Plans following the Notes to Financial Statements. Additional information also is presented in Note 2 and in the Actuarial Section.

# Analysis of Financial Activities — Other **Employee Benefit Plans**

## **GROUP LIFE INSURANCE PROGRAM**

The Group Life Insurance Program provides basic group life insurance coverage for natural death, accidental death, accidental dismemberment and other life insurance benefits to the majority of members covered under the pension plans, as well as to other qualifying employees. Employers and their covered employees pay the premiums for group life insurance coverage; many employers pay the employee's portion.

During FY 2012, the System remitted \$139.9 million to the insurer for claims and administrative costs. This is a slight decrease from the \$145.0 million remitted for FY 2011. Approximately 357,945 active members were covered under the Group Life Insurance Program at June 30, 2012.

The difference between the amounts collected and paid by the System is added to the reserve established to pre-fund group life insurance coverage for retirees. The reserve had net assets held in trust for benefits of \$746.6 million at June 30, 2012; investment income, including net securities lending income, was \$7.3 million during the fiscal year. For FY 2011, this reserve had investment income of \$151.5 million and ended the year with a reserve balance of \$833.1 million, an increase from the \$783.1 million at June 30, 2010.

For FY 2012, the decrease in the reserve balance was primarily the result of continued lower contributions and marginal investment income, which were insufficient to cover the program's claims, administrative expenses and other costs. There was a slight increase in contributions for the year because of an increase in covered payrolls. However, the employer contribution rate used for funding all employer groups was continued at the FY 2011 level. Employer contributions for the Group Life Insurance Program are discussed further in Note 12. Approximately 143,657 retirees were covered under the Group Life Insurance Program at June 30, 2012.

Members covered under the Basic Group Life Insurance Program are eligible to elect additional coverage through the Optional Group Life Insurance Program. This program provides life insurance, accidental death and accidental dismemberment coverage as a supplement to the basic group plan. Members also may cover their spouses and dependent children. Members pay the premiums through payroll deduction. Approximately 65,605 active members and 2,307 retirees were enrolled in the Optional Group Life Insurance Program at June 30, 2012.

Additional information about the Group Life Insurance Program is provided in Note 3.

#### RETIREE HEALTH INSURANCE CREDIT PROGRAM

The Retiree Health Insurance Credit Program provides a tax-free reimbursement for the portion of health insurance premiums eligible retirees pay for single coverage under qualifying health insurance plans. During FY 2012, the System collected \$51.4 million in retiree health insurance credit contributions from participating employers and provided reimbursements to retirees of \$131.1 million. During FY 2011, the System collected \$50.1 million in retiree health insurance credit contributions from participating employers and provided reimbursements of \$126.5 million.

The slight increase in contributions reflects a slight increase in covered payrolls and a continuation of the FY 2011 contribution rates used for funding the state and teacher employer groups. Employer contributions for the Retiree Health Insurance Credit Program are discussed further in Note 12. The growth in health insurance credit reimbursements reflects an increase in the number of eligible retirees.

The Retiree Health Insurance Credit Fund reserve had net assets held in trust for benefits of \$127.2 million at June 30, 2012; investment income, including net securities lending income, was a negative \$1.7 million for the fiscal year. While the investment pool had a positive return for the fiscal year, the Retiree Health Insurance Credit Fund had a larger share of the pool income in the earlier part of the fiscal year when the majority of the investment losses occurred. The reserve balances at June 30, 2011 and June 30, 2010 were \$209.0 million and \$245.0 million, respectively.

Approximately 99,836 retirees were receiving the health insurance credit at June 30, 2012. Additional information is provided in Note 3.

### VIRGINIA SICKNESS AND DISABILITY PROGRAM

The Virginia Sickness and Disability Program (VSDP), also known as the Disability Insurance Trust Fund, provides eligible state employees with sick, family and personal leave and short-term and long-term disability benefits for non-work related and work-related illnesses and injuries. The System is responsible for administering the disability program and the payment of long-term disability benefits. Employers are responsible for administering the leave program and the payment of short-term disability benefits.

During FY 2012, the System did not collect any VSDP contributions from participating employers; however, it did incur long-term disability benefits of \$28.4 million. This is a slight increase from the \$28.2 million in benefits paid in FY 2011. Administrative and other expenses increased slightly from FY 2011. Contributions continue to reflect a continuation of the FY 2011 suspended employer contribution rate used for funding. Employer contributions for the Virginia Sickness and Disability Program are discussed further in Note 12.

The benefit costs reflect continued stability in the number of members receiving long-term disability benefits, the amount of these benefits, the costs of the long-term care benefits and the operating costs of the program. The Disability Insurance Trust Fund reserve had net assets held in trust for benefits of \$344.0 million at June 30, 2012; investment income, including net securities lending income, was \$3.8 million during the fiscal year. The reserve balances at June 30, 2011 and June 30, 2010 were \$369.1 million and \$336.2 million, respectively.

Approximately 76,349 active members and 2,722 former members were receiving benefits at June 30, 2012. Additional information is provided in Note 3.

### LINE OF DUTY ACT PROGRAM

The Line of Duty Act Program was a new program for the System in FY 2011. The System is responsible for identifying eligible individuals; having the VRS actuary prepare an actuarial valuation; collecting contributions; reimbursing the Commonwealth of Virginia's Department of Accounts (DOA) for claims and administrative costs; and managing the assets of the program. DOA is responsible for the administration of the benefits under the program and the payment of claims for death benefits and health insurance reimbursements for eligible state employees and local government employees, including volunteers, who die or become disabled as the result of the performance of their duties as a public safety officer.

The program began receiving contributions in FY 2012; however, these were insufficient to cover the benefits and expenses. The difference was funded by an increase in the loan from the Group Life Insurance Fund. During FY 2012, the cost for the benefits provided by this program was \$10.5 million. This is a slight increase from the \$10.0 million in benefit costs for FY 2011. Additional information is provided in Note 3.

# ACTUARIAL VALUATIONS AND FUNDING PROGRESS - OTHER EMPLOYEE BENEFIT PLANS

The System's actuarial firms perform actuarial valuations of other employee benefit plans administered by the System at least every two years to determine funding requirements. The funding policy provides for periodic employer contributions at actuarially determined rates that will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the costs of all benefits when due.

According to the latest valuations of these plans performed by Milliman, Inc. for the long-term care component of the Disability Insurance Trust Fund and by Cavanaugh Macdonald Consulting, LLC for all other programs as of June 30, 2011, the ratio of assets accumulated by the plans to their total actuarial accrued liabilities for benefits was 36.1% for the Group Life Insurance Fund, 9.7% for the Retiree Health Insurance Credit Fund, 124.6% for the Disability Insurance Trust Fund and zero (0.00%) for the Line of Duty Act Trust Fund. Funding progress for these plans is presented in the Required Supplemental Schedule of Funding Progress—Other Post-Employment Benefit Plans.

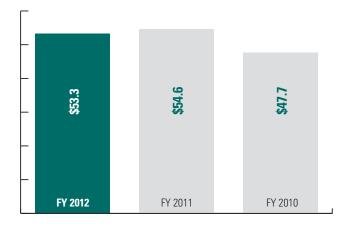
# Market Volatility

The System's investment performance for the fiscal year ended June 30, 2012 was 1.4%; the net assets available for benefits also declined. As noted in this section, in the Introductory Section and in the Chief Investment Officer's letter in the Investment Section, the investment markets continue to be extremely volatile. The System's management estimates that the market value of the trust funds has increased from \$53.3 billion as of June 30, 2012 to approximately \$54.8 billion as of October 31, 2012. This has been primarily due to improvements in the market value of investments in the VRS portfolio. The amount of assets and reserves required to meet future obligations is based, in part, on estimated or expected long-term investment returns. While management cannot predict future market returns, the changes in assets reflects the volatility in the market.

#### SYSTEM NET ASSETS

AT JUNE 30

(EXPRESSED IN BILLIONS)



# Request for Information

This financial report is designed to provide an overview of the System's finances. Questions concerning the information provided in this report or requests for additional information should be addressed to the Chief Financial Officer of the Virginia Retirement System, P.O. Box 2500, Richmond, Virginia 23218-2500.

# VIRGINIA RETIREMENT SYSTEM STATEMENT OF PLAN NET ASSETS – DEFINED BENEFIT PENSION TRUST FUNDS AND OTHER EMPLOYEE BENEFIT TRUST FUNDS

AS OF JUNE 30, 2012 WITH COMPARATIVE INFORMATION AS OF JUNE 30, 2011

# Pension Trust Funds

			onoron mader and			
	Virginia Retirement System	State Police Officers' Retirement System	Virginia Law Officers' Retirement System	Judicial Retirement System	Total Pension Trust Funds	
Assets:						
Cash (Note 5)	\$ 223,681	\$ 2,865	\$ 4,454	\$ 1,763	\$ 232,763	
Receivables:						
Contributions	147,783	1,143	2,671	1,128	- 152,725	
Interest and Dividends	195,246	2,241	3,485	1,379	202,351	
Receivable for Security Transactions	1,095,237	12,572	19,548	7,736	1,135,093	
Other Investment Receivables	2,558	29	46	18	2,651	
Other Receivables	1,340				1,340	
Total Receivables	1,442,164	15,985	25,750	10,261	1,494,160	
Investments (Note 5):						
Bonds and Mortgage Securities	17,724,329	203,448	316,352	125,196	18,369,325	
Stocks	17,518,875	201,090	312,685	123,745	18,156,395	
Fixed Income Commingled Funds	839,728	9,639	14,988	5,931	870,286	
Index and Pooled Funds	4,997,590	57,364	89,199	35,301	5,179,454	
Real Estate	3,566,080	40,933	63,649	25,189	3,695,851	
Private Equity	5,549,272	63,697	99,046	39,197	5,751,212	
Short-Term Investments	239,279	2,747	4,270	1,690	247,986	
Total Investments	50,435,153	578,918	900,189	356,249	52,270,509	
Collateral on Loaned Securities Property, Plant, Furniture and	2,036,748	23,379	36,353	14,387	2,110,867	
Equipment (Note 6)	29,262				29,262	
Total Assets	54,167,008	621,147	966,746	382,660	56,137,561	
Liabilities:						
Retirement Benefits Payable	254,329	3,904	6,805	2,725	267,763	
Refunds Payable	4,208	35	121	-	4,364	
Accounts Payable and Accrued Expenses	26,566	278	432	171	27,447	
Compensated Absences Payable	2,038	-	-	-	2,038	
Insurance Premiums and Claims Payable	-	-	-	-	-	
Payable for Security Transactions	1,424,831	16,355	25,431	10,064	1,476,681	
Other Investment Payables	140,714	1,615	2,512	994	145,835	
Other Payables	997	-	-	-	997	
Obligations Under Security Lending Program	2,046,604	23,492	36,529	14,456	2,121,081	
Total Liabilities	3,900,287	45,679	71,830	28,410	4,046,206	
Net Assets Held in Trust for Benefits (Note 4)	\$ 50,266,721	\$ 575,468	\$ 894,916	\$ 354,250	\$ 52,091,355	

The accompanying Notes to Financial Statements are an integral part of this statement.

Other Employee	Benefit	Trust	Funds
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Totals

\$	746,619	\$ 127,234	\$ 343,972	\$ -	\$ 1,217,825	\$ 53,309,180	\$ 54,562,257		
	101,497	20,611	25,223	13,996	161,327	4,207,533	6,733,532		
_	31,476	5,465	13,733	48	50,722		3,667,779		
	2,164	376	944	3 13,910	3,487 13,910		196,645 11,680		
	21,913	3,805	9,561	34	35,313		2,512,041		
	45,502	-	<u>-</u>	-	45,502	•	48,293		
	-	-	-	-	-	2,038	1,961		
	373	10,777	857	1	12,008		39,062		
	- 69	- 188	- 128	-	- 385	267,763 4,749	251,660 4,411		
	848,116	147,845	369,195	13,996	1,379,152	57,516,713	61,295,789		
	-	447.045	200.405	40.000	4 270 450	29,262	23,164		
	31,324	5,439	13,667	48	50,478		3,662,195		
	775,672	134,685	338,428	1,190	1,249,975	53,520,484	55,633,151		
	3,680	639	1,606	6	5,931	253,917	166,210		
	85,345	14,819	37,236	131	137,531		5,194,663		
	54,845	9,523	23,929	84	88,381		3,111,418		
	12,915 76,861	2,242 13,346	5,635 33,535	20 118	20,812 123,860		1,892,753 6,134,348		
	269,433	46,783	117,554	413	434,183		21,238,020		
	272,593	47,333	118,933	418	- 439,277	18,808,602	17,895,739		
	37,282	7,055	15,425	12,752	72,514	1,566,674	1,945,088		
	13,910	9	6,749	722	21,390		18,524		
	39	2,323 7	17	-	63		107,213		
	3,003 16,844	521 2,925	1,310 7,349	5 26	4,839 27,144		203,504 1,425,051		
	3,486	3,593	-	11,999	19,078		190,796		
\$	3,838	\$ 666	\$ 1,675	\$ 6	\$ 6,185	\$ 238,948	\$ 32,191		
	Group Life Insurance Fund	Retiree Health Disabili ce Insurance Insuran Credit Fund Trust Fu		Line of Duty Act Trust Fund	Total Other Employe Benefit Plans	ee 2012	2011		

# VIRGINIA RETIREMENT SYSTEM STATEMENT OF CHANGES IN PLAN NET ASSETS – DEFINED BENEFIT PENSION TRUST FUNDS AND OTHER EMPLOYEE BENEFIT TRUST FUNDS

FOR THE YEAR ENDED JUNE 30, 2012 WITH COMPARATIVE INFORMATION FOR THE YEAR ENDED JUNE 30, 2011

# Pension Trust Funds

		P	'ension Trust Fund	S	
	Virginia Retirement System	State Police Officers' Retirement System	Virginia Law Officers' Retirement System	Judicial Retirement System	Total Pension Trust Funds
Additions:					
Contributions:  Members  Member Contributions Paid by Employers Employers	\$ 208,243 557,522 970,331	\$ 5,167 1 11,443	\$ 17,510 48 24,644	\$ 47 2,921 18,907	\$ 230,967 560,492 1,025,325
Total Contributions	1,736,096	16,611	42,202	21,875	1,816,784
Investment Income:  Net Appreciation/(Depreciation) in Fair Value of Investments Interest, Dividends and Other Investment Income	( 400,635) 1,287,590	( 4,825) 14,807	( 6,755) 22,765	( 2,549) 9,037	( 414,764) 1,334,199
Total Investment Income Before Investment					
Expenses	886,955	9,982	16,010	6,488	919,435
Investment Expenses	( 289,736)	( 3,329)	( 5,123)	( 2,034)	( 300,222)
Net Investment Income	597,219	6,653	10,887	4,454	619,213
Security Lending Income: Gross Income Less Borrower Rebates and Agent Fees	20,356 ( 2,962)	234 ( 34)	360 ( 52)	143 ( 21)	21,093 ( 3,069)
Net Security Lending Income	17,394	200	308	122	18,024
Miscellaneous Revenue Transfers In	3,782		110		3,782 110
Total Additions	2,354,491	23,464	53,507	26,451	2,457,913
Deductions:  Retirement Benefits  Refunds of Member Contributions Insurance Premiums and Claims Retiree Health Insurance Credit Reimbursements Disability Insurance Premiums and Benefits Line of Duty Benefits	-	46,113 319 - - -	64,849 4,027 - - -	33,454 - - - -	3,401,775 88,923 - - -
Administrative Expenses Other Expenses Transfers Out	25,475 584 110	243 7 -	366 15	143 5 -	26,227 611 110
Total Deductions	3,368,105	46,682	69,257	33,602	3,517,646
Net Increase (Decrease) Net Assets Held in Trust for Benefits - Beginning of Year	( 1,013,614) 51,280,335	( 23,218) 598,686	( 15,750) 910,666	( 7,151) 361,401	( 1,059,733) 53,151,088
Net Assets Held in Trust for Benefits -					
End of Year	\$ 50,266,721	\$ 575,468	\$ 894,916	\$ 354,250	\$ 52,091,355

The accompanying Notes to Financial Statements are an integral part of this statement.

Other Employee Benefit Trust Funds

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lı	Group Life nsurance	Retiree Health Insurance	Disability Insurance	Line of Duty Act	Total Other Employee Benefit	0040			
	Fund	Credit Fund	Trust Fund	Trust Fund	Plans	2012	2011		
\$	(4)	\$ -	\$ -	\$ -	\$ (4)	\$ 230,963	\$ 27,591		
Ψ	-	-	-	-	-	560,492	736,407		
	46,538	51,356	78	11,554	109,526	1,134,851	889,459		
	46,534	51,356	78	11,554	109,522	1,926,306	1,653,457		
	( 9,006)	( 4,717)	( 3,270)	4	( 16,989)	( 431,753)	7,905,212		
	20,664	3,787	8,937	1	33,389	1,367,588	1,364,850		
	11,658	( 930)	5,667	5	16,400	935,835	9,270,062		
	( 4,638)	( 838)	( 2,008)	-	(7,484)	( 307,706)	( 320,030)		
	7,020	( 1,768)	3,659	5	8,916	628,129	8,950,032		
	323 ( 48)	57 ( 9)	140 ( 21)	-	520 ( 78)	21,613 ( 3,147)	17,326 ( 1,398)		
	275	48	119		442	18,466	15,928		
	751	-	-	-	751	4,533	1,643		
	54,580	49,636	3,856	11,559	119,631	<b>2,577,544</b>	130 <b>10,621,19</b> 0		
	-	-	-	-	-	3,401,775	3,263,895		
	139,943	-	-	-	- 139,943	88,923 139,943	100,544 145,027		
	133,343	131,102	-	-	131,102	131,102	126,499		
	_	-	28,444	-	28,444	28,444	28,187		
	-	-		10,492	10,492	10,492	10,006		
	77	333	475	316	1,201	27,428	27,746		
	1,006	-	36	751	1,793	2,404	8,129		
		-	-	-	-	110	130		
	141,026	131,435	28,955	11,559	312,975	3,830,621	3,710,163		
	(86,446)	( 81,799)	( 25,099)	-	( 193,344)	( 1,253,077)	6,911,027		
	833,065	209,033	369,071		1,411,169	54,562,257	47,651,230		
\$	746,619	\$ 127,234	\$ 343,972	\$ -	\$ 1,217,825	\$ 53,309,180	\$ 54,562,257		

# Notes to Financial Statements JUNE 30, 2012 AND 2011

# 1. Summary of Significant Financial Policies, Administration and Management

#### A. FINANCIAL REPORTING ENTITY

The Virginia Retirement System (the System) is an independent agency of the Commonwealth of Virginia. The System administers two defined benefit pension plans, Plan 1 and Plan 2, and other employee benefit plans, and is included in the basic financial statements

of the Commonwealth of Virginia. As required by generally accepted accounting principles (GAAP), the System's financial statements include all funds for which financial transactions are recorded in its accounting system and for which the Board of Trustees exercises administrative responsibility.

Effective January 1, 1997, the *Constitution of Virginia* was amended to strengthen the independence of the Virginia Retirement System. As set forth in Section 11 of Article X, the funds of the retirement system shall be deemed separate and independent trust funds, segregated from all other funds of the Commonwealth, and invested and administered solely in the interests of members, retirees and beneficiaries.

Fiduciary Responsibility of the VRS
Board of Trustees — As stated in Section
51.1-124.30(C) of the *Code of Virginia:*"... the Board shall invest the assets of the Retirement System with the care, skill, prudence, and diligence under the circumstances then prevailing that a

the Retirement System with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims." Accordingly, the Board must sufficiently diversify the portfolio to minimize the risk of large losses unless, under the circumstances, it is clearly prudent not to do so. Primary risk measures are volatility in the plan's assets, funded status and contribution rates.

The Board consists of five members appointed by the Governor and four members appointed by the Joint Rules Committee of the Virginia General Assembly, all subject to confirmation by the General Assembly. The Board appoints a director to serve as the chief administrative officer of the System and a chief investment officer to direct, manage and administer the investment of the System's funds. The Board also retains outside managers to advise and assist in the implementation of these policies. The Board of Trustees has appointed BNY Mellon as the custodian of designated assets of the System.

The Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), the Virginia Law Officers' Retirement System (VaLORS) and the Judicial Retirement System (JRS) are administered in accordance with Title 51.1, Chapters 1, 2, 2.1, 3 and 4, respectively, of the *Code* of Virginia (1950), as amended. The Group Life Insurance Fund, the Retiree Health Insurance Credit Fund and the Disability Insurance Trust Fund are administered in accordance with Title 51.1, Chapters 5, 14 and 11, respectively, of the *Code of* Virginia (1950), as amended. The Line of Duty Act Trust Fund was created by and is administered in accordance with the provisions of the 2010 Appropriation Act (Item

258, Chapter 874, 2010 Virginia Acts of Assembly) and confirmed in the 2011 Appropriation Act (Item 258, Chapter 890, 2011 Virginia Acts of Assembly) and the 2012 Appropriation Act (Item 258, Chapter 2, 2012 Special Session I Virginia Acts of Assembly).

The Optional Life Insurance Fund is administered in accordance with Sections 51.1-512 and 51.1-512.1 of the *Code of Virginia* (1950), as amended. Optional life insurance is an insured product, and the premium collection is handled by the insurer. The Board provides only oversight for the program with limited administrative responsibility.

# **B. ADMINISTRATION AND MANAGEMENT**

1. Pension Plans and Other Employee Benefit Plans. The Board of Trustees (the Board) is responsible for the general administration and operation of the defined benefit pension plans and other employee benefit plans. The Board has full power to invest and reinvest the trust funds of the System through the adoption of investment policies and guidelines that fulfill the Board's investment objective to maximize long-term investment returns while targeting an acceptable level of risk.

State statutes governing the plans administered by the System may be amended only by the General Assembly of Virginia. Additional information about the plans is provided in Notes 2 and 3.

- 2. Other Plans Established by the Commonwealth of Virginia. The Board has oversight and limited administrative responsibility, but no investment responsibility, for several other plans of the Commonwealth. Because the Board neither owns nor has custody of the assets, their financial transactions are not recorded in the System's accounting system. Therefore, these programs are not included in the System's Basic Financial Statements:
- Commonwealth of Virginia 457 Deferred Compensation Plan and the Virginia Cash Match Plan for state employees and employees of participating political subdivisions. Additional information about the 457 and Cash Match Plans is provided in the Statistical Section.
- Commonwealth of Virginia (COV) Voluntary Group Long Term Care Insurance Program, an employee-paid program for eligible employees.
- Defined contribution plans, referred to as the Optional Retirement Plans 1 and 2, for political appointees, certain employees of public institutions of higher education and certain employees of public school divisions and teaching hospitals.
- Commonwealth Health Research Fund, which provides financial support for human health research on behalf of citizens of the Commonwealth.
- Volunteer Firefighters' and Rescue Squad Workers' Service Award Fund, which provides service awards to eligible volunteer firefighters and rescue squad workers.

#### C. ACCOUNTING BASIS

The accounting and presentation of the defined benefit pension plans and other employee benefit plans use the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual basis, revenues are recognized when earned, and expenses are recognized when liabilities are incurred, regardless of the timing of related cash flows. Member and employer contributions are recognized as revenues when due, pursuant to formal commitments as well as statutory or contractual requirements. Investment income is recognized as earned by the plans. Benefits and refunds are recognized when due and payable in accordance with the terms of the plans.

## D. ACTUARIAL BASIS AND CONTRIBUTION RATES

The funding policy for the pension plans provides for periodic employer contributions at actuarially determined rates, which will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the cost of all benefits when due. Member and employer contributions are required by Title 51.1 of the Code of Virginia (1950), as amended.

Contribution rates are developed using the entry age normal cost method for both normal cost and amortization of the unfunded actuarial accrued liability. Gains and losses are reflected in the unfunded Actuarial Accrued Liability (AAL), which is being amortized as a level percentage of covered payroll within 30 years or less.

In addition to determining contribution requirements, actuarial computations present an estimate of the discounted present value of the prospective accrued liability contributions that employers will have to pay to ensure that such contributions-when combined with the assets on hand, the normal contributions to be made in the future by employers and members, and investment income-will be sufficient to pay all benefits due to current members in the future as well as to annuitants and designated beneficiaries. Actuarial valuations estimate the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include future employment, mortality and the use of the benefit. Actuarially determined amounts are subject to revision

as actual results are compared with past expectations and new estimates are made about the future. The Required Supplemental Schedules of funding progress and employer contributions, which follow the Notes to Financial Statements, present historical information about the increase or decrease of the actuarial values of the plans' assets over time relative to the AAL for benefits.

# E. GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENTS

- Governmental Accounting Standards Board (GASB) Statement No. 40, Deposit and Investment Risk Disclosures, requires disclosures related to deposits, authorized investments and investment risk. Required investment risk disclosures address interest rate risk; credit risk, to include custodial credit risk and concentrations of credit risk; and foreign currency risk. The statement also requires disclosures of custodial credit risk and foreign currency risk for depository accounts. Information about the System's deposit and investment risk is provided in Note 5.
- GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, requires additional reporting and disclosures for other post-employment benefits (OPEBs). The statement became effective for VRS-administered OPEBs beginning with the fiscal year ended June 30, 2007. The Required Supplemental Schedules of funding progress and employer contributions for the pension plans and other employee benefit plans present information about contributions in comparison to the annual required contribution (ARC), which is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost for each year and amortize any unfunded actuarial liabilities or funding excess over a period not to exceed 30 years.

- GASB Statement No. 50, Pension Disclosures— An Amendment to GASB Statements No. 25 and No. 27, more closely aligns the financial reporting requirements for pensions with those for OPEBs. The statement became effective beginning with the fiscal year ended June 30, 2008. Information about the pension plans and other employee benefit plans administered by the System is presented in Notes 2 and 3.
- GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets, establishes a "specific conditions" approach to recognizing intangible assets, specifically computer software. The statement became effective beginning with the fiscal year ended June 30, 2010. Capitalized costs are incurred during the Application Development Stage and consist of design of chosen path, including software configuration and software interfaces; coding; installation of hardware; testing, including the parallel processing phase; and data conversion to the extent that the data are necessary to make the computer software operational. Other costs incurred before or after the Application Development Stage are expensed when incurred. Additional disclosures resulting from the implementation of this statement are presented in Note 6.
- GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, establishes accounting and financial reporting standards for governments that enter into derivative instruments. The statement became effective beginning with the fiscal year ended June 30, 2010. The objective of the statement is to enhance the usefulness and comparability of derivative financial instrument information reported by state and local governments. It provides a comprehensive framework for the measurement, recognition and disclosure of derivative instrument transactions. Additional disclosures resulting from the implementation of this statement are presented in Note 5.
- GASB Statement No. 59, Financial Instruments Omnibus, clarifies the definition of items that should be included in the reporting required by Statement No. 53. The statement became effective beginning with the fiscal year ended June 30, 2010. This is reflected in the disclosures in Note 5.

• GASB Statement No. 64, Derivative Instruments: Application of Hedge Accounting Termination Provisions – An Amendment of GASB Statement No. 53, clarifies the circumstances in which hedge accounting should continue when a swap counterparty, or a swap counterparty's credit support provider, is replaced. The statement became effective beginning with the fiscal year ended June 30, 2012. This is reflected in the disclosures in Note 5.

#### F. INVESTMENTS

1. Investment Valuation. Investments are reported at fair value as determined by the System's master custodian, BNY Mellon, from its Global Pricing System. This system assigns a price source, based on asset type and the vendor pricing products to which the master custodian subscribes, for every security held immediately following its acquisition. The master custodian monitors prices supplied by these sources daily.

When a pricing source is unable to provide a price, quotes are sought from major investment brokers and market-making dealers; or internal calculations are applied, if feasible. As a last resort, the master custodian will contact investment managers for a price. The master custodian prices commingled funds, partnerships and real estate assets from statements received from the funds, partnerships or investment managers.

The pricing sources used by the master custodian provide daily prices for equity securities; corporate, government and mortgage-backed fixed income securities; private placement securities; futures and options on futures; open-ended funds; and foreign exchange rates. Depending on the vendor, collateralized mortgage obligations (CMOs), adjustable rate mortgages (ARMs) and asset-backed securities are priced daily, weekly or twice a month as well as at month end. Municipal fixed income securities and options on U.S. Treasury/GNMA securities are priced at month end.

2. Investment Transactions and Income. Security transactions and related gains and losses are recorded on a trade-date basis. The cost of investments sold is the average cost of the aggregate holding of the specific investment sold. Dividend income is recorded on the exdividend date, and interest income is accrued as earned. Futures contracts are valued daily, with the resulting adjustments recorded as realized gains or losses arising from the daily settlement of the variation margin. Gains and losses related to forward contracts and options are recognized at the time the contracts are settled. Investments in limited partnerships are accounted for on the equity method of accounting, and their earnings or losses for the period are included in investment income using the equity method.

# G. PROPERTY, PLANT, FURNITURE, EQUIPMENT AND INTANGIBLE ASSETS

Tangible capital assets are recorded at cost at the time of acquisition and are reported net of accumulated depreciation. The System capitalizes all property, plant and equipment that have a cost or value greater than \$5,000. Depreciation is computed on the straight-line basis over the estimated useful life of the property, ranging from five years to 40 years. Intangible capital assets for the System include internal and external costs incurred during VRS' current Application Development Stage. These costs are depreciated over the software's useful life.

#### H. ACCUMULATED LEAVE AND DISABILITY CREDITS

Employees of the System participate in the Commonwealth's annual leave program and in its sick leave program or the Virginia Sickness and Disability Program (VSDP), which is administered by the System. Additional information about VSDP is presented in Note 3. Unused annual leave may be accumulated and is paid at the time of permanent separation from service up to the maximum calendar-year limit. For vested employees who are not covered under VSDP, unused sick leave is paid at a rate of 25% of the amount accumulated, not to exceed \$5,000, at the time of permanent separation. VSDP-covered employees with unused disability credits converted from sick leave at the time of enrollment may be paid in the same manner as for non-VSDP employees or may convert these credits to service credit at a rate of 173 disability credits to one month of service.

The accrued liability for unused annual leave, sick leave and disability credits for System employees at June 30, 2012 and 2011 was computed using salary rates in effect at those times and represents annual and sick leave earned up to the allowable ceilings as well as unused, converted disability credits. This information is included in the Statement of Plan Net Assets—Defined Benefit Pension Trust Funds and Other Employee Benefit Trust Funds.

#### I. ADMINISTRATIVE EXPENSES AND BUDGET

The Board of Trustees approves expenses related to the administration and management of the trust fund. These expenses are included in a budget prepared in compliance with the Commonwealth's biennial budgetary system (cash basis).

Appropriations are controlled at the program level and lapse at the end of the fiscal year. Administrative expenses are funded exclusively from investment income. Expenses for goods and services received but not paid for prior to the System's fiscal year end are accrued for financial reporting purposes in accordance with generally accepted accounting principles (GAAP). A reconciliation of the difference between the GAAP basis and budgeted basis is presented in the Schedule of Administrative Expenses following the Required Supplemental Schedules.

# J. INVESTMENT INCOME ALLOCATION

Income earned on investments is distributed monthly to the VRS, SPORS, VaLORS and JRS retirement plans; the Group Life Insurance Fund; the Retiree Health Insurance Credit Fund; and the Disability Insurance Trust Fund. Distribution of investment income is based on the respective equity of each trust fund in the common investment pool.

The retirement plans distribute their cumulative investment income, net of administrative expenses, in the following manner:

- Investment income is distributed to each individual member contribution account based on a rate of 4.00% applied to each member's cumulative balance as of the close of the preceding fiscal year.
- The remaining portion is allocated monthly to the participating employer retirement allowance accounts based on the ratio of their member account and employer account balances to the total of all such balances.

## K. USE OF ESTIMATES

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States of America, requires management to make estimates and assumptions that affect the reported amounts of net assets held in trust for benefits at June 30, 2012. Actual results could differ from those estimates.

# L. SUMMARIZED COMPARATIVE DATA/ RECLASSIFICATIONS

The Basic Financial Statements include certain prior-year summarized comparative information in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2011, from which the summarized information was derived.

# 2. Pension Plans

#### A. PLAN DESCRIPTIONS

1. Establishment of the System. The Virginia Retirement System (the System) was established on March 1, 1952 as the administrator of VRS, a governmental retirement plan qualified under Section 401(a) of the Internal Revenue Code. Its mission is to provide a defined benefit plan for state employees, teachers, other eligible school employees and employees of political subdivisions that elect to participate in the System.

VRS is a mixed agent, cost-sharing, multipleemployer system, which administers two defined benefit plans, the VRS Plan 1 and the VRS Plan 2. The System also administers Plan 1 and Plan 2 benefit provisions through the following single-employer retirement systems:

- State Police Officers' Retirement System (SPORS), established on July 1, 1950 for state police officers
- Virginia Law Officers' Retirement System (VaLORS), established on October 1, 1999 for Virginia law officers other than state police
- Judicial Retirement System (JRS), established on July 1, 1970 for judges of a court of record or a district court of the state and other eligible judicial employees

The System is required by law to use the plans' accumulated assets to pay benefits when due to eligible members, retirees and beneficiaries. Full-time permanent, salaried employees of VRS-participating employers are covered automatically under VRS, SPORS, VaLORS or JRS upon employment; some part-time permanent, salaried state employees also are covered under VRS. Information regarding the membership is presented in Figure 2.9. Teaching, research and administrative faculty of the state's public colleges and universities who elect an optional retirement plan, as well as permanent, salaried employees of the state's two public teaching hospitals, are not covered under the VRS defined benefit plans.

2. Pension Plan Provisions and Requirements. Under Plan 1 and Plan 2, members are vested after attaining five years of service credit. They become eligible to retire with an unreduced or reduced benefit when they meet the age and service requirements for their plan. The unreduced benefit is actuarially reduced to calculate the reduced benefit amount. A cost-ofliving adjustment (COLA), based on changes in the Consumer Price Index for all Urban Consumers, is granted on July 1 of the second calendar year after retirement and is effective each July 1 thereafter, when provided.

Members not covered under the Virginia Sickness and Disability Program (VSDP) (see Note 3) are eligible to be considered for VRS disability retirement. If a member dies while in active service, his or her beneficiary or survivor may qualify for a death-inservice benefit. Provisions for the defined benefit plans are presented in Figure 2.10.

FIGURE 2.9 – ACTIVE, RETIRED AND TERMINATED MEMBERS AND BENEFICIARIES AT JUNE 30

AT COME OF		20	2012	2011		
	VRS	SPORS	VaLORS	JRS	Total	Total
Retirees and Beneficiaries Receiving Benefits Terminated Employees Entitled to Benefits	158,266	1,161	2,872	452	162,751	156,165
but not Receiving Them	36,287	75	457	3	36,822	35,393
Total	194,553	1,236	3,329	455	199,573	191,558
Active Members:						
Vested	239,064	1,587	6,260	348	247,259	241,598
Non-Vested	91,083	299	3,153	32	94,567	98,142
Total	330,147	1,886	9,413	380	341,826	339,740

# FIGURE 2.10 - DEFINED BENEFIT PLAN PROVISIONS

AS ESTABLISHED BY TITLE 51.1 OF THE CODE OF VIRGINIA (1950), AS AMENDED

Members qualify for retirement when they become vested (have at least five years of service credit) and meet the age and service requirements for their plan, as shown in the following table. The benefit is calculated using a retirement multiplier as a percentage of the member's average final compensation multiplied by the member's total service credit at retirement.

PROVISIONS	PLAN 1 Hired Before July 1, 2010	PLAN 2 Hired On or After July 1, 2010
Average Final Compensation	Average of the member's 36 consecutive months of highest compensation as a covered employee.	Average of the member's 60 consecutive months of highest compensation as a covered employee.
Member Contributions	State employees, excluding state elected officials, judges and optional retirement plan participants, contribute 5.00% of their compensation each month to their member contribution accounts. School divisions and political subdivisions may elect to pick up the 5.00% member contribution on behalf of their employees.	State employees contribute 5.00% of their compensation each month to their member contribution accounts. Employees of school divisions and political subdivisions may contribute all or a portion of the 5.00% member contribution as elected by the employer.
Vesting and Refunds	Vested members who leave covered employment are eligible for a full refund of their member contribution account balance. Non-vested members are eligible for a refund, excluding any contributions made by the employer after July 1, 2010 and the interest on these contributions. <i>Exception:</i> Members who are involuntarily separated from employment for causes other than job performance or misconduct are eligible for a full refund, including any employer contributions and interest.	Same as Plan 1.
Normal Retirement Age	VRS: Age 65.	Normal Social Security retirement age.
	SPORS, VaLORS and political subdivision hazardous duty employees: Age 60.	Same as Plan 1.
	JRS: Age 65.	Same as Plan 1.
Earliest Unreduced Retirement Eligibility	VRS: Age 65 with at least five years of service credit or age 50 with at least 30 years of service credit.	Normal Social Security retirement age with at least five years of service credit or when age and service credit equal 90. <i>Example:</i> Age 60 with 30 years of service credit. <i>Note:</i> Plan 2 state employees, except those covered under SPORS and VaLORS, must be at least age 60 to qualify for retirement under the Workforce Transition Act (WTA) if not qualified under the rule of 90.

# FIGURE 2.10 - DEFINED BENEFIT PLAN PROVISIONS, cont.

PROVISIONS	PLAN 1 Hired Before July 1, 2010	PLAN 2 Hired On or After July 1, 2010				
Earliest Unreduced Retirement Eligibility, cont.	SPORS, VaLORS and political subdivision hazardous duty employees: Age 60 with at least five years of service credit or age 50 with at least 25 years of service credit.	Same as Plan 1.				
	<ul> <li>JRS: Age 65 with at least five years of service credit or age 60 with at least 30 years of service credit. Service earned under JRS is weighted. The weighting factors under Plan 1 are:</li> <li>3.5 for JRS members appointed or elected before January 1, 1995</li> <li>2.5 for JRS members appointed or elected on or after January 1, 1995</li> </ul>	<ul> <li>Same as Plan 1. Service earned under JRS is weighted. The weighting factors under Plan 2 are:</li> <li>1.5 for JRS members appointed or elected before age 45</li> <li>2.0 for JRS members appointed or elected between ages 45 and 54</li> <li>2.5 for JRS members appointed or elected at age 55 or older</li> </ul>				
Earliest Reduced Retirement Eligibility	VRS: Age 55 with at least five years of service credit or age 50 with at least 10 years of service credit.	Age 60 with at least five years of service credit.				
	SPORS, VaLORS and political subdivision employees: Age 50 with at least five years of service credit.	Same as Plan 1.				
	JRS: Age 55 with at least five years of service credit.	Same as Plan 1.				
Retirement Multipliers	VRS and JRS: 1.70%.	Same as Plan 1.				
	SPORS, sheriffs and regional jail superintendents: 1.85%.	Same as Plan 1.				
	VaLORS: 1.70% or 2.00%.	2.00%.				
	Political subdivision hazardous duty employees: 1.70% or 1.85% as elected by the employer.	Same as Plan 1.				
Cost-of-Living Adjustment (COLA)  During years of deflation or no inflation, the COLA is 0%.	Matches the first 3.00% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half the remaining increase, up to a maximum COLA of 5.00%.	Matches the first 2.00% increase in the CPI-U and half the remaining increase, up to a maximum COLA of 6.00%.				

FIGURE 2.11 - MEMBER AND EMPLOYER CONTRIBUTIONS

FOR THE YEARS ENDED JUNE 30

(EXPRESSED IN THOUSANDS)

		20	2012		2011						
	VRS	SPORS		VaLORS		JRS		Total		Total	
Member Contributions	\$ 208,243	\$	5,167	\$	17,510	\$	47	\$	230,967	\$	27,623
Member Contributions Paid by Employers	557,522		1		48		2,921		560,492		736,407
Employer Contributions	970,331		11,443		24,644		18,907	1,025,325		783,996	
Total Contributions	\$ \$ 1,736,096		16,611	\$	42,202	\$	21,875	\$	1,816,784	\$	1,548,026

#### **B. CONTRIBUTIONS**

Members and employers are required to contribute to the retirement plans as provided by Title 51.1 of the *Code of Virginia* (1950), as amended. The member contribution is 5.00% of compensation, contributed by members or employers each month to members' contribution accounts. Members leaving covered employment are eligible to request a refund of their member contribution account balance. Vested members and those involuntarily separated from employment for causes other than job performance or misconduct are eligible for a full refund. Non-vested members are eligible for the balance, excluding any member contributions made by employers to their accounts after July 1, 2010 and the interest on these contributions.

Each participating employer is required to contribute the remaining amounts necessary to fund the pension plans using the entry age normal actuarial cost method adopted by the Board of Trustees. The System's actuary, Cavanaugh Macdonald Consulting, LLC, computed the amount of contributions to be provided by state agency, state police and Virginia law officer employers; each participating political subdivision employer; and state judicial employers. The contribution rates for FY 2012 and FY 2011 were based on the actuary's valuation as of June 30, 2009. In addition, the actuary computed a separate contribution requirement for the teacher cost-sharing pool for each year using the same valuation dates.

As shown in Figure 2.11, contributions for the fiscal years ended June 30, 2012 and 2011 totaled \$1,816,784,000 and \$1,548,026,000, respectively, in accordance with statutory requirements.

Employer contributions to the VRS cost-sharing pool for teachers represented 6.33% of covered payrolls. Employer contributions for state employees represented 2.08% of covered payrolls for the first nine months and 6.58% for the last quarter of the fiscal year. Each political subdivision's contributions ranged from zero (0.00%) to 26.01% of covered payrolls. State employer contributions to SPORS, VaLORS and JRS represented 7.73%, 5.07% and 28.65%, respectively, for the first nine months and 21.16%, 13.09% and 42.58%, respectively, for the last quarter of the fiscal year. With the exception of the political subdivision rates, these rates reflected the normal cost and the amortization of a portion of the unfunded actuarial accrued liability of each of the plans from the June 30, 2009 actuarial valuation

using modified actuarial assumptions, reduced by a factor representing the savings associated with the introduction of the Plan 2 provisions for newly hired employees. This is discussed further in Note 12. Member contributions for both years represented 5.00% of covered payrolls.

# C. FUNDED STATUS AND FUNDING PROGRESS -PENSION PLANS

The most recent actuarial valuation prepared for the pension plans is as of June 30, 2011. The following schedule presents selected information from that valuation report. Additional information is presented in the Required Supplemental Schedule of Funding Progress-Pension Plans following the Notes to Financial Statements as well as in the Actuarial Section.

# SCHEDULE OF FUNDING PROGRESS - PENSION PLANS

AS OF JUNE 30, 2011 (DOLLARS IN MILLIONS)

	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)
Virginia Retirement System	\$ 52,559	\$ 75,185	\$ 22,626	69.9%	\$ 14,709	153.8%
State Police Officers' Retirement System	617	986	369	62.6%	100	370.3%
Virginia Law Officers' Retirement System	926	1,683	757	55.0%	356	212.5%
Judicial Retirement System	371	569	198	65.2%	59	336.8%



The actuarial methods and assumptions used to determine funding requirements are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. Actuarial methods and assumptions are presented in the Actuarial Section. The following schedule presents selected information as of the latest actuarial valuation:

SCHEDULE OF ACTUARIAL METHODS AND SIGNIFICANT ASSUMPTIONS - PENSION PLANS

	VRS	SPORS	VaLORS	JRS
Valuation Date	June 30, 2011	June 30, 2011	June 30, 2011	June 30, 2011
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent of Pay, Open			
Payroll Growth Rate:				
State Employees	3.00%	3.00%	3.00%	3.00%
Teachers	3.00%	N/A	N/A	N/A
Political Subdivision Employees	3.00%	N/A	N/A	N/A
Remaining Amortization Period:*				
State Employees and Teachers	10 and 30 years			
Political Subdivision Employees	30 years	N/A	N/A	N/A
Asset Valuation Method	5-Year,	5-Year,	5-Year,	5-Year,
	Smoothed	Smoothed	Smoothed	Smoothed
	Market	Market	Market	Market
<b>Actuarial Assumptions:</b>				
Investment Rate of Return**	7.00%	7.00%	7.00%	7.00%
Projected Salary Increases:**				
State Employees	3.75% to 5.60%	3.50% to 4.75%	3.50% to 4.75%	4.50%
Teachers	3.75% to 6.20%	N/A	N/A	N/A
Political Subdivision—				
Non-Hazardous Duty Employees	3.75% to 5.60%	N/A	N/A	N/A
Political Subdivision—				
Hazardous Duty Employees	3.50% to 4.75%	N/A	N/A	N/A
Post-Retirement Benefit Increases:***				
Plan 1	2.50%	2.50%	2.50%	2.50%
Plan 2	2.25%	2.25%	2.25%	2.25%

<sup>\*</sup>The deferred contribution for FY 2011 and FY 2012 for state employees and teachers is being amortized using a level-dollar, closed, 10-year period. The amortization period of the Unfunded Actuarial Accrued Liability begins at 30 years on June 30, 2011 and will decrease by one each year until reaching the minimum of 20 years.

<sup>\*\*</sup>Includes inflation at 2.50%.

<sup>\*\*\*</sup>Compounded annually.

# 3. Other Employee and Post-Employment Benefit Plans (OPEBs)

#### A. PLAN DESCRIPTIONS

The System administers other employee and postemployment benefit plans for active, deferred and retired members of VRS, SPORS, VaLORS and JRS. These plans are the Group Life Insurance Program, the Retiree Health Insurance Credit Program and the Virginia Sickness and Disability Program (VSDP). The System also manages the assets of the Line of Duty Act Fund; the Department of Accounts (DOA) administers the benefits and payment of claims under the program.

Contributions and payments for other employee benefit plans for active members occur on a current basis; therefore, the System does not record these plan net assets and is not required to report their funding progress and employer contributions. The System records plan net assets and reports funding progress and employer contributions for post-employment benefit plans. This information is provided in the Required Supplemental Schedules following the Notes to Financial Statements. Additional information also is presented in the Statistical Section.

1. Group Life Insurance Program. The Group Life Insurance Program is a cost-sharing, multiple-employer plan. Members whose employers participate in the Group Life Insurance Program are covered automatically under the Basic Group Life Insurance Program upon employment. They also are eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program.

Participating employers and covered employees are required by Title 51.1 of the *Code of Virginia* (1950), as amended, to contribute to the cost of group life insurance benefits. Employers may assume employees' contributions. A portion of the premium contributions collected during members' active careers is placed in an Advance Premium Deposit Reserve to fund coverage for eligible retired and deferred members. Approximately 357,945 active members and 143,657 retirees were covered under the Basic Group Life Insurance Program at June 30, 2012.

For members who elect optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct the premiums from members' paychecks and pay the premiums to the insurer. Premiums are based on members' ages and approved by the Board of Trustees. Any differences and adjustments are settled between the employer and the insurer. Approximately 65,605 active members and 2,307 retirees were covered under the Optional Group Life Insurance Program at June 30, 2012.

2. Retiree Health Insurance Credit Program. The Retiree Health Insurance Credit Program is an agent, multiple-employer plan. It provides eligible retirees a tax-free reimbursement for health insurance premiums for single coverage under qualifying health plans, including coverage under a spouse's plan, not to exceed the amount of the monthly premium or the maximum credit, whichever is less. Premiums for health plans covering specific conditions are ineligible for reimbursement. Employers are required by Title 51.1 of the Code of Virginia (1950), as amended, to contribute to the program. The amount is financed based on employer contribution rates determined by the System's actuary.

Approximately 99,836 retirees were covered under the health insurance credit program at June 30, 2012.



3. Virginia Sickness and Disability Program. The Virginia Sickness and Disability Program (VSDP) is a single-employer plan. It provides state employees with sick, family and personal leave and short-term and long-term disability benefits. State agencies are required by Title 51.1 of the Code of Virginia (1950), as amended, to contribute to the cost of providing long-term disability benefits and administering the program. Approximately 76,349 members were covered under VSDP at June 30, 2012, and approximately 2,722 former members were receiving benefits from the program during the fiscal year.

4. Line of Duty Act Program. A new program in FY 2011, the Line of Duty Act Program is a cost-sharing, multiple-employer plan. It provides death and health insurance reimbursement benefits to eligible state employees and local government employees, including volunteers, who die or become disabled as a result of the performance of their duties as a public safety officer.

As required by the 2010 Appropriation Act (Item 258, Chapter 874, 2010 Virginia Acts of Assembly) and confirmed in the 2011 Appropriation Act (Item 258, Chapter 890, 2011 Virginia Acts of the Assembly) and the 2012 Appropriation Act (Item 258, Chapter 2, 2012 Special Session I Virginia Acts of Assembly), the System is responsible for managing the assets of the program. Participating employers made contributions to the program beginning in FY 2012. The employer contribution rate was determined by the System's actuary using the anticipated costs and the number of covered individuals associated with all participating employers.

Provisions for other employee benefit and postemployment benefit plans are presented in Figure 2.12.

#### FIGURE 2.12 – OTHER EMPLOYEE BENEFIT AND POST-EMPLOYMENT BENEFIT PLAN PROVISIONS

AS ESTABLISHED BY TITLE 51.1 OF THE CODE OF VIRGINIA (1950), AS AMENDED

# **Eligible Employees**

## Coverage

# **VRS Group Life Insurance Program: Basic Coverage**

The VRS Group Life Insurance Program was established on July 1, 1960 for state employees, teachers and employees of political subdivisions that elect the program, which include the following employers that do not participate in VRS for retirement: City of Richmond, City of Portsmouth, City of Roanoke, City of Norfolk and Roanoke City School Board.

Basic group life insurance coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.

- Natural death benefit equal to the employee's compensation rounded to the next highest thousand and then doubled.
- Accidental death benefit, which is double the natural death benefit.
- Accidental dismemberment benefit, safety belt benefit, repatriation benefit, felonious assault benefit and accelerated death benefit option.
- Continuation of death benefit and accelerated death benefit option for employees who retire or who have met the age and service requirements for retirement upon termination. Coverage begins to reduce by 25% on the January 1 following one calendar year of retirement or termination and reduces by 25% each January 1 until it reaches 25% of its original value.

# **Optional Group Life Insurance Program**

Employees covered under the VRS Group Life Insurance Program are eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program. Employees pay the premiums through payroll deduction.

Spousal coverage ends if the employee's coverage ends or the couple divorce. Coverage for dependent children ends if the employee's coverage ends or when the children marry, become self-supporting, reach age 21 or reach age 25 as a dependent attending college full time. Coverage continues for dependent unmarried children who are disabled.

The program provides natural death and accidental death or dismemberment coverage:

- Employees select one, two, three or four times their compensation, not to exceed \$700,000.
- Spouses may be covered for up to half the maximum amount of the employees' coverage, not to exceed \$350,000. Dependent children who are at least 15 days old may be covered for \$10,000, \$20,000 or \$30,000, depending on the option employees select for themselves.
- Accidental death and dismemberment coverage ends upon retirement. Optional life insurance amounts begin to reduce by 25 percent based on the retiree's age, beginning with the retiree's normal retirement age under his or her plan; coverage ends at age 80. Retirees may elect to continue coverage within 31 days of retirement.

# **Retiree Health Insurance Credit Program**

The Retiree Health Insurance Credit Program was established on January 1, 1990 for retired state employees covered under VRS, SPORS, VaLORS and JRS who retire with at least 15 years of service credit. The program was opened to teachers and eligible employees of participating political subdivisions on July 1, 1993. The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance premiums retirees pay for single coverage, excluding any portion covering a spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.

## FIGURE 2.12 - OTHER EMPLOYEE BENEFIT AND POST-EMPLOYMENT BENEFIT PLAN PROVISIONS, cont.

#### **Health Insurance Credit Dollar Amounts at Retirement**

	Amount per Year of Service	Maximum Credit per Month*
State employees	\$4.00	No Cap
Teachers and other professional school employees	\$4.00	No Cap
General registrars and their employees, constitutional officers and their employees and local social service employees	\$1.50	\$45.00
General registrars and their employees, constitutional officers and their employees and local social service employees, if the political subdivision elects the \$1.00 enhancement	\$2.50	\$75.00
Other political subdivision employees as elected by the employer	\$1.50	\$45.00

# Health Insurance Credit Dollar Amounts at Disability Retirement and for VSDP Long-Term Disability

Employees who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program (VSDP) are eligible for the health insurance credit.\*\*

Eligible Employees	Coverage
State employees other than state police officers	\$120 per month or \$4 per year of service credit per month, whichever is higher.
State police officers	Non-work related disability: \$120 per month or \$4 per year of service credit per month, whichever is higher. Work-related disability: No health insurance credit for premiums qualified under the Virginia Line of Duty Act; may receive the credit for premiums paid for other qualified health plans.
Teachers and other professional school employees	Either (a) \$4 multiplied by twice the amount of service credit per month; or (b) \$4 multiplied by the amount of service earned had the employee been active until age 60 per month, whichever is higher.
Political subdivision employees as elected by the employer	\$45 per month.

<sup>\*</sup>Not to exceed the individual premium amount.

<sup>\*\*</sup>Not to exceed the individual premium amount. State employees who retire from being on long-term disability under VSDP must have at least 15 years of service credit to qualify for the health insurance credit as a retiree.

### **Eligible Employees**

# Virginia Sickness and **Disability Program (VSDP)**

VSDP, also known as the Disability Insurance Trust Fund, was established on January 1, 1999 to provide short-term and long-term disability benefits for non-work related and work-related disabilities. Eligible employees are enrolled automatically upon employment. They include:

- Full-time and part-time permanent, salaried state employees covered under VRS, SPORS and VaLORS (members new to VaLORS following its creation on October 1, 1999 have been enrolled since the inception of VSDP).
- State employees hired before January 1, 1999 who elected to transfer to VSDP rather than retain their eligibility to be considered for VRS disability retirement.
- Public college and university faculty members who elect the VRS defined benefit plan. They may participate in VSDP or their institution's disability program, if offered. If the institution does not offer the program or the faculty member does not make an election, he or she is enrolled in VSDP.

### Coverage

- Sick, family and personal leave.
- · Short-term disability benefit beginning after a seven-calendar day waiting period from the first day of disability. The benefit provides income replacement beginning at 100% of the employee's pre-disability income, reducing to 80% and then 60%.
- · Long-term disability benefit beginning after 125 workdays of short-term disability and continuing until the employee reaches his or her normal retirement age. The benefit provides income replacement of 60% of the employee's pre-disability income. If an employee becomes disabled within five years of his or her normal retirement age, the employee will receive up to five years of VSDP benefits, provided he or she remains medically eligible.
- Income replacement adjustment to 80% for catastrophic conditions.
- VSDP Long-Term Care Plan, a self-funded program that assists with the cost of covered long-term care services.

#### Note:

- Employees hired or rehired on or after July 1, 2009 must satisfy eligibility periods before becoming eligible for non-work related short-term disability coverage and certain income replacement levels.
- A state employee who is approved for VSDP benefits on or after the date that is five years prior to his or her normal retirement date is eligible for five years of VSDP benefits.
- Employees on work-related short-term disability receiving only a workers' compensation payment may be eliqible to purchase service credit for this period if retirement contributions are not being withheld from the workers' compensation payment. The rate will be based on 5.00% of the employee's compensation.

# **Commonwealth of Virginia** (COV) Voluntary Group **Long Term Care Insurance Program**

The following members between the ages of 18 and 79 are eligible to apply:

- State employees and public college and university faculty members
- Employees of school divisions and political subdivisions whose employers have elected to participate in the program
- · Vested deferred members and retirees (their employers are not required to have elected the program)
- Select family members of eligible members

The program provides assistance with covered longterm care expenses at group rates. Active members pay the premiums for themselves and any covered family members through payroll deduction or directly to Genworth Life Insurance Company, the insurer, provided the employer has arranged for payroll deductions with Genworth Life. All other participants pay the premiums directly to Genworth.

FIGURE 2.12 - OTHER EMPLOYEE BENEFIT AND POST-EMPLOYMENT BENEFIT PLAN PROVISIONS, cont.

	Eligible Employees	Coverage
Line of Duty Act Program	Paid employees and volunteers in hazardous duty positions in Virginia localities, including hazardous duty employees covered under VRS, SPORS and VaLORS.	Coverage provides death and health insurance benefits, which are administered by the Virginia Department of Accounts. The System is responsible for managing the assets of the Line of Duty Act Fund.

# B. FUNDED STATUS AND FUNDING PROGRESS — OTHER POST-EMPLOYMENT BENEFIT PLANS

The most recent actuarial valuations prepared for other post-employment benefit plans administered by the System are as of June 30, 2011. Actuarial valuations for these plans involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

The calculations in these actuarial valuations are based on the benefits provided under the terms of the plans as of June 30, 2011 and on the pattern of cost sharing between the employers and plan members at that point. These calculations reflect a long-term perspective. The actuarial methods and assumptions used in these valuations include techniques that are designed to reduce short-term volatility in the actuarial accrued liabilities and the actuarial value of assets.

The Retiree Health Insurance Credit benefit is based on a member's employer eligibility and his or her years of service. The monthly maximum credit amount cannot exceed the member's actual health insurance premium costs. The actuarial valuation for this plan assumes the maximum credit is payable for each eligible member. Since this benefit is a flat dollar amount multiplied by the member's years of service and the maximum benefit is assumed, no assumption relating to health care cost trend rates is needed or applied.

The following schedule presents selected information from that valuation report. Additional information is presented in the Required Supplemental Schedule of Funding Progress—Other Post-Employment Benefit Plans following the Notes to Financial Statements, as well as in the Actuarial Section.

#### SCHEDULE OF FUNDING PROGRESS - OTHER POST-EMPLOYMENT BENEFIT PLANS

AS OF JUNE 30, 2011 (dollars in millions)

	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)
Group Life Insurance Fund	\$ 852	\$ 2,359	\$ 1,507	36.1%	\$ 16,543	9.1%
Retiree Health Insurance Credit Fund	213	2,195	1,982	9.7%	14,111	14.0%
Disability Insurance Trust Fund	369	296	(73)	124.6%	3,372	(2.2%)
Line of Duty Act Trust Fund *	-	399	399	0.0%	N/A	N/A

<sup>\*</sup>The Line of Duty Act Program was established and set up as a trust fund effective July 1, 2010. Contributions to the trust fund are based on the number of participants in the program using a per capita-based contribution versus a payroll-based contribution.

Actuarial methods and assumptions for other post-employment benefit plans are presented in the Actuarial Section. The following schedule presents selected information as of the latest actuarial valuation:

# SCHEDULE OF ACTUARIAL METHODS AND SIGNIFICANT ASSUMPTIONS - OTHER POST-EMPLOYMENT **BENEFIT PLANS**

	Group Life Insurance Fund	Retiree Health Insurance Credit Fund	Disability Insurance Trust Fund	Line of Duty Act Trust Fund
Valuation Date	June 30, 2011	June 30, 2011	June 30, 2011	June 30, 2011
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Projected Unit Credit	Projected Unit Credit
Amortization Method	Level Percent of Pay, Open	Level Percent of Pay, Open	Level Percent of Pay, Open	Level Percent of Pay, Open
Payroll Growth Rate:				
State Employees	3.00%	3.00%	3.00%	3.00%
Teachers	3.00%	3.00%	N/A	N/A
Political Subdivision Employees	3.00%	3.00%	N/A	3.00%
State Police and Virginia Law Officers	3.00%	3.00%	3.00%	3.00%
Judges	3.00%	3.00%	N/A	N/A
Remaining Amortization Period*	30 Years	30 Years	30 Years	5 and 30 Years
Asset Valuation Method:				
State Employees and Teachers	5-Year, Smoothed Market	5-Year, Smoothed Market	Market Value	Market Value
Political Subdivision Employees				
and State-Funded Local Employees	5-Year, Smoothed Market	Market Value	N/A	Market Value
Actuarial Assumptions:				
Investment Rate of Return**	7.00%	7.00%	7.00%	4.75%
Projected Salary Increases:***				
State Employees	3.75% to 5.60%	3.75% to 5.60%	3.75% to 5.60%	N/A
Teachers	3.75% to 6.20%	3.75% to 6.20%	N/A	N/A
Political Subdivision—				
Non-Hazardous Duty Employees	3.75% to 5.60%	3.75% to 5.60%	N/A	N/A
Political Subdivision—				
Hazardous Duty Employees	3.50% to 4.75%	3.50% to 4.75%	N/A	N/A
State Police and Virginia Law Officers	3.50% to 4.75%	3.50% to 4.75%	3.50% to 4.75%	N/A
Judges	4.50%	4.50%	N/A	N/A

<sup>\*</sup>The amortization period of the Unfunded Actuarial Accrued Liability begins at 30 years as of June 30, 2011 and will decrease by one year until reaching the minimum of 20 years.

<sup>\*\*</sup>Includes inflation at 2.50%.

<sup>\*\*\*</sup>Projected salary increases for the Retiree Health Insurance Credit Fund are used in the application of the actuarial cost method. Projected salary increase factors are not applicable to the Line of Duty Act Program since neither the benefit nor the cost is salary based.

# 4. Reserve Accounts

The reserve account balances available for benefits at June 30, 2012 and 2011 are presented in Figure 2.13. These funds are required by Titles 51.1 and 2.2 of the *Code of Virginia* (1950), as amended, to provide for the payment of current and future benefits as follows:

- Member and employer contributions and investment income fund the member and employer reserves. Each member has a member contribution account that accumulates member contributions plus annual interest of 4.00%. Each employer has a retirement allowance account that accumulates employer contributions, transfers of investment income less administrative expenses incurred in operating the retirement plans, and transfers of member contributions and accrued interest upon a member's retirement. Benefit payments are charged to employers' retirement allowance accounts.
- The Group Life Insurance Advance Premium
  Deposit Reserve accumulates a portion of
  insurance premium contributions collected
  during members' active careers and their
  investment earnings, and is charged for life
  insurance benefits paid and expenses incurred in
  operating the Group Life Insurance Program.
- Employer contributions and investment income fund the Retiree Health Insurance Credit Reserve. It is charged for credit reimbursements applied to the monthly health insurance premiums of eligible retired members and expenses incurred in operating the Retiree Health Insurance Credit Program.
- Employer contributions and investment income fund the Disability Insurance Trust Fund. It is charged for long-term disability benefits and expenses incurred in operating the Virginia Sickness and Disability Program (VSDP).

 Employer contributions and investment income fund the Line of Duty Act Trust Fund. It is charged for Line of Duty Act death and health insurance benefits and expenses incurred in operating the Line of Duty Act Program.
 The program was new in FY 2011 and still has no assets.

# FIGURE 2.13 – RESERVE BALANCES AVAILABLE FOR BENEFITS

AT JUNE 30 (EXPRESSED IN THOUSANDS)

	2012	2011
Virginia Retirement System		
Member Reserve	\$11,002,540	\$10,543,421
Employer Reserve	39,264,181	40,736,914
Total VRS	50,266,721	51,280,335
State Police Officers'		
Retirement System		
Member Reserve	83,804	79,982
Employer Reserve	491,664	518,704
Total SPORS	575,468	598,686
Virginia Law Officers'		
Retirement System		
Member Reserve	216,406	209,607
Employer Reserve	678,510	701,059
Total VaLORS	894,916	910,666
Judicial Retirement System		
Member Reserve	39,160	38,654
Employer Reserve	315,090	322,747
Total JRS	354,250	361,401
Group Life Insurance Advance		
Premium Deposit Reserve	746,619	833,065
Retiree Health Insurance		
Credit Reserve	127,234	209,033
Disability Insurance Trust		
Fund (VSDP)	343,972	369,071
Line of Duty Act Trust Fund		
Total Pension and Other		
<b>Employee Benefit Reserves</b>	\$53,309,180	\$54,562,257

# 5. Deposits and Investments

## A. DEPOSITS

Deposits of the System maintained by the Treasurer of Virginia at June 30, 2012 and 2011, as shown in Figure 2.14, were entirely insured under the Virginia Security for Public Deposits Act, Section 2.2-4400 et seq. of the *Code of Virginia* (1950), as amended, which provides for an assessable, multiple financial institution collateral pool. Deposits with the System's master custodian, BNY Mellon, were entirely insured by federal depository insurance coverage.

## FIGURE 2.14 - DEPOSITS

AT JUNE 30		(EXPRESSED IN THOUSANDS
	2012 Carrying Amount	2011 Carrying Amount
Treasurer of Virginia Master Custodian	\$ 224,067 14,881	\$ 31,678 513
<b>Total Deposits</b>	\$ 238,948	\$ 32,191

## **B. INVESTMENTS**

1. Authorized Investments. The Board of Trustees of the System has full power to invest and reinvest the trust funds in accordance with Section 51.1-124.30 of the *Code of Virginia* (1950), as amended. This section requires the Board to discharge its duties solely in the interests of members, retirees and beneficiaries. It also requires the Board to invest the assets with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

Investment value and earnings of the investment pool are proportionally allocated among the System's trust funds on the basis of each fund's equity interest in the common investment pool. An Investment Summary is included in the Investment Section. The equity interest of each fund as of June 30, 2012 and 2011 is presented in Figure 2.15.

### FIGURE 2.15 - EQUITY INTERESTS

AT JUNE 30

Fund	2012	2011
Virginia Retirement System	94.24%	93.93%
State Police Officers' Retirement System	1.08%	1.10%
Virginia Law Officers' Retirement System	1.68%	1.66%
Judicial Retirement System	0.67%	0.66%
Group Life Insurance Fund	1.45%	1.59%
Retiree Health Insurance Credit Fund	0.25%	0.40%
Disability Insurance Trust Fund (VSDP)	0.63%	0.66%
Line of Duty Act Trust Fund	0.00%	0.00%
Total Equity Interests	100.00%	100.00%

2. Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The risk is managed within the portfolio using the effective duration or option-adjusted methodology, as shown in Figure 2.16. It is widely used in the management of fixed income portfolios in that it quantifies, to a much greater degree, the risk of interest rate changes. The methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending on the degree of change in rates and the slope of the yield curve. All of the System's fixed income portfolios are managed in accordance with investment guidelines, most of which are specific as to the degree of interest rate risk that can be taken.

# FIGURE 2.16 - EFFECTIVE DURATION OF DEBT SECURITIES BY INVESTMENT TYPE

AS OF JUNE 30, 2012 (DOLLARS IN THOUSANDS) Weighted Avg. Effective Duration Market Investment Type Value (Years) U.S. Government \$ 2,926,309 5.39 2,555,978 2.66 Agencies Municipal Securities 41,536 6.09 **Asset-Backed Securities** 120,801 0.31 Collateralized Mortgage **Obligations** 199,300 3.12 **Commercial Mortgages** 304,356 3.03 Corporate and Other Bonds 12,635,190 3.61 891,098 Fixed-Income Commingled Funds 4.99 Cash and Cash Equivalents 171,871 0.08 **Total Debt Securities** \$19,846,439 3.79

3. Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the System. As of June 30, 2012, the System's fixed income assets that are not government guaranteed represented 85% of the fixed income assets.

The System's policy for credit risk is based on the concept of a risk budget rather than specific limitations related to the rating of an individual security. The System's risk budget is allocated among the different investment strategies. The System's fixed income portfolio credit quality and exposure levels as of June 30, 2012 are summarized in Figure 2.17.

Credit risk for derivative instruments held by the System results from counterparty risk assumed by the System. This is essentially the risk that the borrower will be unable to meet its obligation. Information regarding the System's credit risk related to derivatives is provided in Note 5.B.7. Policies related to credit risk pertaining to the System's securities lending program are provided in Note 5.B.5.

FIGURE 2.17 - CREDIT QUALITY AND EXPOSURE LEVELS OF NONGOVERNMENT GUARANTEED SECURITIES

AS OF JUNE 30, 2012

(EXPRESSED IN THOUSANDS)

Credit Rating Level	Agencies	Municipal Securities	Asset-Backed Securities	Collateralized Mortgage Obligations	Commercial Mortgages	Corporate and Other Bonds	Fixed-Income Commingled Funds	Cash and Cash Equivalents
U.S. Government, SI		Not-Rated	Debt:					
U.S. Government Ago	encies:							
FHLB:	Φ 550	Φ.	ф	Φ.	Φ.	Φ.	Φ.	Φ.
A2	\$ 559	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Aaa	5,252	-	-		-	-	-	-
FHLMC:								
Aaa	853,949	-	-	23,526	-	-	-	-
FNMA:								
A2	7,454	-	-	-	-	-	-	-
Aaa	1,201,824	-	-	68,921	-	-	-	-
Aaa-mf	-	-	-	-	-	2,640,063	-	-
VMIG1	-	-	-	-	-	7,242	-	-
VMIG2	-	-	-	-	-	2,270	-	-
Not Rated	435,414	-	6,415	27,475	99,301	4,538,886	39	171,871
Long-Term Debt:								
Aaa	51,526	26,770	37,650	39,074	174,465	232,207	-	-
Aa1	-	-	5,916	1,570	164	29,794	-	-
Aa2	-	491	891	1,590	13,346	54,173	-	-
Aa3	_	338	2,373	-	5,238	63,953	_	_
A1	_	2,525	1,621	952	5,445	108,321	159,176	_
A2	_	3,843	2,073	495	76	306,126	-	-
A3	_	7,569	443	-	-	301,871	3,839	-
Baa	_	-	-	_	_	-	615,092	_
Baa1	_	_	_	_	_	544,145	-	_
Baa2	_	_	1,168	_	_	531,354	_	_
Baa3	_	_	1,764	623	_	648,731	112,952	_
Ba1	_	_	1,127	69	_	263,681	112,002	_
Ba2			1,638	1,487		282,065		
Ba3	_		371	3,818	6,175	479,980	_	_
B1	_	_	9,584	1,288	0,175	474,799	_	_
B2	-	-		1,200	-		-	-
	-	-	1,758		-	438,563	-	-
B3	-	-	5,797	2,232	-	384,612	-	-
Caa1	-	-	2,994	2,460	4.40	172,088	-	-
Caa2	-	-	4,881	5,361	146	52,970	-	-
Caa3	-	-	9,155	7,576	-	49,363	-	-
Ca	-	-	21,686	8,630	-	4,867	-	-
C	-	-	1,496	2,153	-	693	-	-
(P) Ba3	-	-	-	-	-	1,339	-	-
(P) Caa1	-	-	-	-	-	5,975	-	-
(P) B1	-			-		15,059		
Total	\$2,555,978	\$ 41,536	\$ 120,801	\$ 199,300	\$ 304,356	\$12,635,190	\$ 891,098	\$ 171,871

VRS used Moody's ratings for this presentation. A large portion of the securities are not rated by Moody's but are rated by other rating agencies.

- Concentration of Credit Risk. This is the risk of loss that may be attributed to the magnitude of a government's investment in a single issue. The System's investment guidelines for each specific portfolio limits investments in any corporate entity to no more that 5.00% of the market value of the account for both the internally and externally managed portfolios. There is no concentration of investments in any one organization that represents 5.00% or more of plan net assets available for benefits.
- Custodial Credit Risk. This is the risk that in the event of the failure of the counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. The System's market value of securities that were uninsured and held by a counterparty at June 30, 2012 and 2011 are presented in Figure 2.18.

FIGURE 2.18 - CUSTODIAL CREDIT RISK

AT JUNE 30 (EXPRESSED IN THOUSANDS)

	2012	2011		
U.S. Government and Agency Mortgage Securities	\$ 11.778	\$ 42.647		
Held by Broker-Dealer Under	Ψ 11,770	Ψ 12,017		
Securities Lending Program:				
U.S. Government and Agency				
Mortgage Securities	-	44,018		
Corporate and Other Bonds	1,467	-		
Common and Preferred Stocks	1,708,638	855,172		
Total	\$1,721,883	\$ 941,837		

4. Foreign Currency Risk. Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The System's currency risk exposures, or exchange rate risk, primarily exist in the international and global equity investment holdings. From time to time, the System's external managers may hedge their portfolios' foreign currency exposures with currency forward contracts, depending on their views about a specific foreign currency relative to the U.S. dollar. The System's exposure to foreign currency risk as of June 30, 2012 is highlighted in Figure 2.19.



# FIGURE 2.19 - CURRENCY EXPOSURES BY ASSET CLASS

AS OF JUNE 30, 2012 (EXPRESSED IN THOUSANDS)

	Cash			Fixed		Duivata		ا			
Currency	and Cash Equivalents	Equity		Fixed Income		Private Equity	Real Estate	II	nternational Funds		Total
U.S. Dollar \$	-	\$	- \$	-	\$	-	\$ -	\$	891,258	\$	891,258
British Pound Sterling	7,264	752,27	2	(117,234)		1,400	7,455		-		651,157
Hong Kong Dollar	2,876	585,22	1	-		-	-		-		588,097
Japanese Yen	15,737	603,81	5	(94,942)		-	(227)		-		524,383
Canadian Dollar	3,110	349,68	3	163,280		-	-		-		516,078
South Korean Won	1,462	445,92	2	2,187		-	-		-		449,571
Norwegian Krone	2,285	43,02	5	301,789		-	-		-		347,099
Euro Currency Unit	26,338	769,32	2	(484,721)		27,391	-		-		338,330
Brazil Real	1,688	239,42	5	71,682		-	-		-		312,795
Swedish Krona	939	107,28	2	164,830		819	-		-		273,870
New Taiwan Dollar	3,713	242,07	3	-		-	-		-		245,789
Indian Rupee	1,011	172,42	9	414		-	-		-		173,854
South African Comm Rand	411	137,73	3	32,864		-	-		-		171,008
Swiss Franc	12,201	207,86	2	(53,758)		-	-		-		166,305
Mexican New Peso	5,479	60,29	)	86,317		-	-		-		152,086
Thailand Baht	309	102,20	)	21,358		-	-		-		123,867
New Turkish Lira	994	86,75	2	31,726		_	-		-		119,472
Malaysian Ringgit	863	33,50		48,347		_	-		-		82,717
Indonesian Rupiah	566	39,89		40,541		_	-		-		80,997
Singapore Dollar	1,029	56,17		11,767		_	-		-		68,970
Polish Zloty	470	34,29		34,048		-	-		-		68,813
Danish Krone	403	33,24		· -		-	-		-		33,644
Russian Ruble (New)	13	30		32,802		_	-		-		33,122
Philippines Peso	1,323	21,37	4	(2,106)		-	-		-		20,591
Hungarian Forint	133	1,97		13,753		_	-		-		15,861
Peruvian Nuevo Sol	-		-	14,819		_	-		-		14,819
Columbian Peso	-		-	13,715		_	-		-		13,715
Czech Koruna	387	11,63	3	-		_	-		-		12,025
Egyptian Pound	514	9,09		-		-	-		-		9,611
Israeli Shekel	317	7,66	1	-		_	-		-		7,978
Uruguayan Peso	-		-	7,484		_	-		-		7,484
Nigerian Naira	-		_	7,227		-	-		-		7,227
Turkish Lira	7,189		_	-		-	-		-		7,189
Chilean Peso	-	6,47	4	193		-	-		-		6,667
Chinese Yuan Renminbi	-	6	3	5,939		-	-		-		6,007
UAE Dirham	138	3,86	2	-		_	-		-		4,000
Omani Rial	-	1,96		-		_	-		-		1,962
Argentina Peso	487	•	_	-		-	-		-		487
Moroccan Dirham	1		_	-		_	-		-		1
New Zealand Dollar	214	79	3	(107,679)		_	-		-		(106,667)
Australian Dollar	1,586	240,82		(380,133)		-	-		-		(137,724)
Total		\$ 5,408,46			\$	29,610	\$ 7,228	\$	891,258	\$	6,304,515
=		=======================================	= =		=		- 1,220	=		=	

5. Securities Lending. Under authorization of the Board, the System lends its fixed income and equity securities to various broker-dealers on a temporary basis. This program is administered through an agreement with the System's custodial agent bank. All security loan agreements are collateralized by cash, securities or an irrevocable letter-of-credit issued by a major bank, and have a market value equal to at least 102% of the market value for domestic securities and 105% for international securities. Securities received as collateral cannot be pledged or sold by the System unless the borrower defaults. Contracts require the lending agents to indemnify the System if the borrowers fail to return the securities lent and related distributions and if the collateral is inadequate to replace the securities lent. All securities loans can be terminated on demand by either the System or the borrowers. The majority of loans are open loans, meaning the rebate is set daily. This results in a maturity of one or two days on average, although securities are often on loan for longer periods. The maturity of loans generally does not match the maturity of collateral investments, which averages 43 days. At year end, the System had no credit risk exposure to borrowers because the amounts it owes the borrowers exceeded the amounts the borrowers owe the System. All securities are marked to market daily and carried at market value.

The market value of securities on loan at June 30, 2012 and 2011 was \$3,913,126,000 and \$4,543,731,000, respectively. The June 30, 2012 and 2011 balances were composed of U.S. government and agency securities of \$0 and \$1,667,331,000, respectively; corporate and other bonds of \$59,324,000 and \$316,725,000, respectively; and common and preferred stocks of \$3,853,802,000 and \$2,559,675,000, respectively. The value of collateral (cash and non-cash) at June 30, 2012 and 2011 was \$4,074,754,000 and \$4,717,646,000, respectively. Securities on loan are included with investments on the statement of plan net assets. The invested cash collateral is included in the statement of plan net assets as an asset and corresponding liability.

At June 30, 2012, the invested cash collateral had a market value of \$2,161,344,000 and was composed of commercial paper of \$677,683,000, certificates of deposit of \$713,178,000, floating rate notes of \$600,691,000, asset-backed securities of \$11,538,000, interest-bearing notes of \$49,477,000 and repurchase agreements of \$108,877,000. As of June 30, 2012, the System's cash collateral reinvestment pool had an unrealized loss of \$14.0 million.

- 6. Accounts Receivable/Accounts Payable for Security Transactions. In addition to unsettled purchases and sales, accounts receivable and accounts payable for security transactions at June 30, 2012 and 2011 included (1) receivables for deposits with brokers for securities sold short of \$417,891,000 and \$430,885,000, respectively; and (2) payables for securities sold short and not covered with market values of \$404,390,000 and \$399,813,000, respectively.
- 7. Derivative Financial Instruments. Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates or financial indexes. They include futures, forwards, options and swap contracts. Some traditional securities, such as structured notes, can have derivative-like characteristics. In this case, the return may be linked to one or more indexes and asset-backed securities, such as collateralized mortgage obligations (CMOs), which are sensitive to changes in interest rates and pre-payments. Futures, forwards, options and swaps generally are not recorded on the financial statements, whereas structured notes and asset-backed investments generally are recorded.

The System is a party, directly and indirectly, to various derivative financial investments that may or may not appear on the financial statements and that are used in the normal course of business to enhance returns on investments and manage risk exposure to changes in value resulting from fluctuations in market conditions. These investments may involve, to varying degrees, elements of credit and market risk in excess of amounts recognized on the financial statements.

At June 30, 2012, the System had four types of derivative financial instruments: futures, currency forwards, options and swaps. Futures, currency forwards and options contracts provide the System with the opportunity to build passive benchmark positions, manage portfolio duration in relation to various benchmarks, adjust portfolio yield curve exposure and gain market exposure to various indexes in a more efficient way and at lower transaction costs. Credit risks depend on whether the contracts are exchange-traded or exercised over-the-counter. Market risks arise from adverse changes in market prices, interest rates and foreign exchange rates.

8. Futures. Futures contracts are contracts to deliver or receive securities at a specified future date and at a specified price or yield. Futures contracts are traded on organized exchanges (exchange-traded) and require an initial margin (collateral) in the form of cash or marketable securities. The net change in the futures contract value is settled daily, in cash, with the exchanges. The net gains or losses resulting from the daily settlements are included in the System's financial statements. Holders of futures contracts look to the exchange for performance under the contract and not to the entity holding the offsetting futures position. Accordingly, the amount at risk posed by nonperformance of counterparties to futures contracts is minimal. The notional value of the System's investment in futures contracts at June 30, 2012 and 2011 is shown in Figure 2.20.

FIGURE 2.20 - FUTURES

AT JUNE 30

(EXPRESSED IN THOUSANDS)

	2012	2011	
	Notional Value		
Cash and Cash Equivalent			
Derivatives Futures:			
Long	\$ -	\$ -	
Short	(143,472)	(52,582)	
<b>Equity Derivatives Futures:</b>			
Long	474,687	1,226,545	
Short	-	(69,000)	
Fixed Income Derivatives			
Futures:			
Long	17,818	632,094	
Short	 (66,863)	(416,406)	
Total Futures	\$ 282,170	\$1,320,651	

9. Currency Forwards. Currency forwards represent foreign exchange contracts and are used by the System to effect settlements and to protect the base currency (\$US) value of portfolio assets denominated in foreign currencies against fluctuations in the exchange rates of those currencies. A forward foreign currency exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated price. The credit risk of currency contracts that are exchange-traded lies with the clearinghouse of the exchange where the contracts are traded. The credit risk of currency contracts traded over-thecounter lies with the counterparty, and exposure usually is equal to the unrealized profit on in-themoney contracts. The market risk in foreign currency contracts is related to adverse movements in currency exchange rates. Information on the System's currency forwards contracts at June 30, 2012 and 2011 is shown in Figure 2.21.

# FIGURE 2.21 - CURRENCY FORWARDS

AT JUNE 30 (EXPRESSED IN THOUSANDS)

Currency	Cost	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Market Value 2012	Market Value 2011
Australian Dollar	(588,418)	159,569	(761,777)	\$(602,208)	\$ (436,820)
Brazil Real	(9,259)	19,904	(29,080)	(9,176)	(11,989)
British Pound Sterling	(786,044)	255,922	(1,042,461)	(786,539)	(736,914)
Canadian Dollar	(91,712)	337,004	(427,131)	(90,127)	(349,740)
Chilean Peso	78	5,540	(5,347)	193	(3,863)
Chinese Yuan Renminbi	5,826	14,472	(8,533)	5,939	2,498
Columbian Peso	(709)	4,221	(4,856)	(635)	1,006
Czech Koruna	-	-	-	-	(4,271)
Danish Krone	(22,045)	8,813	(31,107)	(22,294)	(53,979)
Euro Currency Unit	(2,204,043)	441,595	(2,671,728)	(2,230,133)	(2,474,116)
Hong Kong Dollar	(82,076)	4,548	(86,634)	(82,086)	(119,335)
Hungarian Forint	10,527	13,214	(1,886)	11,328	950
Indian Rupee	585	3,971	(3,557)	414	1,010
Indonesian Rupian	9,472	9,580	-	9,580	333
Israeli Shekel	(14,420)	1,174	(15,559)	(14,385)	(19,628)
Japanese Yen	(874,105)	100,422	(975,697)	(875,275)	(941,104)
Kazakhstan Tenge	-	-	-	-	7,950
Malaysian Ringgit	31,239	31,333	(228)	31,105	26,587
Mexican New Peso	(19,048)	9,813	(30,243)	(20,430)	(801)
New Taiwan Dollar	-	-	-	-	(4,189)
New Turkish Lira	8,217	12,842	(4,482)	8,360	4,019
New Zealand Dollar	(109,187)	77,883	(190,827)	(112,944)	60,015
Norwegian Krone	265,789	317,799	(50,629)	267,170	88,031
Peruvian Nuevo Sol	255	1,019	(761)	258	(563)
Philippines Peso	(2,622)	3,656	(6,267)	(2,611)	9,644
Polish Zloty	2,885	11,338	(8,342)	2,996	14,337
Russian Ruble (New)	9,343	9,724	(175)	9,549	15,083
Singapore Dollar	(19,902)	9,543	(29,475)	(19,932)	(34,984)
South African Comm Rand	(22,785)	21,544	(44,457)	(22,913)	(5,912)
South Korean Won	2,224	2,760	(573)	2,187	1,520
Swedish Krona	107,058	237,518	(127,162)	110,356	134,369
Swiss Franc	(258,357)	134,714	(395,685)	(260,971)	(529,151)
Thailand Baht	5,006	5,124	(129)	4,995	11,911
U.S. Dollar	4,646,227	6,858,273	(2,212,046)	4,646,227	5,333,172
Total Forwards Subject to Foreign Currency Risk				\$ (42,002)	\$ (14,924)

10. Options. Options may be either exchangetraded or negotiated directly between two counterparties over the counter. Options grant the holder the right, but not the obligation, to purchase (call) or sell (put) a financial instrument at a specified price and within a specified period of time from the writer of the option. As a purchaser of options, the System typically pays a premium at the outset. This premium is reflected as an asset on the financial statements. The System then retains the right, but not the obligation, to exercise the options and purchase the underlying financial instrument. Should the option not be exercised, it expires worthless and the premium is recorded as a loss.

A writer of options assumes the obligation to deliver or receive the underlying financial instrument on exercise of the option. Certain option contracts may involve cash settlements based on specified indexes such as stock indexes. As a writer of options, the System receives a premium at the outset. This premium is reflected as a liability on the financial statements, and the System bears the risk of an unfavorable change in the price of the financial instrument underlying the option. Information on the System's options balances at June 30, 2012 and 2011 is shown in Figure 2.22.

### FIGURE 2.22 - OPTIONS

AT JUNE 30 (EXPRESSED IN THOUSANDS)

	2012	2011
	Notion	nal Value
Cash and Cash Equivalent Options:		
Call	\$ -	\$ -
Put	-	40
Equity Options:		
Call	-	(182)
Put	-	(95)
Fixed Income Options:		
Call	-	87
Put	-	144
Swaptions:		
Call	(978)	(5,557)
Put	(118)	601
Total Options	\$ (1,096)	\$ (4,962)

11. Swap Agreements. Swaps are negotiated contracts between two counterparties for the exchange of payments at certain intervals over a predetermined timeframe. The payments are based on a notional principal amount and calculated using either fixed or floating interest rates or total returns from certain instruments or indexes. Swaps are used to manage risk and enhance returns. To reduce the risk of counterparty nonperformance, the System generally requires collateral on any material gains from these transactions. During FY 2012, the System entered into credit defaults, inflation, interest rate and total return swaps. Information on the System's swap balances at June 30, 2012 and 2011 is shown in Figure 2.23.

AS OF JUNE 30

2	Notional	V/D0 D	Counterparty
Counterparty	Amount	VRS Rate	Rate
Credit Default Swaps:			
Credit Suisse Group AG	\$ 38,452		
Credit Suisse Group AG	12,533		
Credit Suisse Group AG	12,000		
Credit Suisse Group AG	8,000		
Credit Suisse Group AG	6,250		
Credit Suisse Group AG	5,900		
Credit Suisse Group AG	5,000		
Credit Suisse Group AG	5,000		
Credit Suisse Group AG	5,000		
Credit Suisse Group AG	4,575		
Credit Suisse Group AG	4,050		
Credit Suisse Group AG	4,050		
Credit Suisse Group AG	3,700		
Credit Suisse Group AG	2,500		
Credit Suisse Group AG	2,094		
Credit Suisse Group AG	1,500		
Credit Suisse Group AG	800		
Credit Suisse Group AG	500		
Credit Suisse Group AG	475		
Credit Suisse Group AG	200		
Credit Suisse AG	2,500		
Credit Suisse AG	7,000		
Credit Suisse AG	15,948		
Credit Suisse AG	35,000		
Deutsche Bank AG	10,000		
Deutsche Bank AG	9,300		
Deutsche Bank AG	6,500		
Deutsche Bank AG	6,500		
Deutsche Bank AG	6,000		
Deutsche Bank AG	5,800		
Deutsche Bank AG	5,800		
Deutsche Bank AG	5,000		
Deutsche Bank AG	5,000		
Deutsche Bank AG	5,000		
Deutsche Bank AG	5,000		
Deutsche Bank AG	5,000		
Deutsche Bank AG	4,000		
Deutsche Bank AG	4,000		
Deutsche Bank AG	3,800		
Deutsche Bank AG	3,426		
Deutsche Bank AG	3,150		
Deutsche Bank AG	2,300		
Deutsche Bank AG	1,500		
Deutsche Bank AG	1,200		
Deutsche Bank AG	600		
Deutsche Bank AG	500		

06/20/2017         Buying         1.000%         \$ 2,738         -           06/20/2016         Selling         1.000%         100         -           06/20/2017         Selling         1.000%         (72)         -           12/20/2016         Buying         1.000%         (14)         -           12/20/2016         Selling         1.000%         (14)         -           12/20/2016         Buying         1.000%         (121)         -           12/20/2016         Buying         1.000%         (121)         -           12/20/2016         Buying         1.000%         (68)         -           12/20/2016         Buying         1.000%         (121)         -           08/20/2017         Selling         1.000%         (375)         -           12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         (375)         -           12/20/2016         Buying         1.000%         (375)         -           12/20/2017         Selling         1.000%         (30)         -           12/20/2016         Selling         1.000%         (31)         -	Maturity Date	Buying/Selling Protection	Pay/Receive Rate	Market Value 2012	Market Value 2011
Bof/20/2016   Selling	06/20/2017	Buvina	1.000%	\$ 2.738	-
08/20/2017         Selling         1.000%         (72)         -           12/20/2016         Buying         1.000%         (157)         -           12/20/2016         Buying         1.000%         (14)         -           12/20/2016         Buying         1.000%         (121)         -           12/20/2016         Buying         1.000%         (68)         -           12/20/2016         Buying         1.000%         81         -           09/20/2017         Selling         1.000%         (121)         -           12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         305         -           12/20/2016         Buying         1.000%         305         -           12/20/2016         Buying         1.000%         (33)         -           12/20/2016         Selling         1.000%         (33)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2016         Selling         1.000%         (11)         -           12/20/2016         Selling         1.000%         1         -		. •			-
12/20/2016         Buying         1.000%         157         -           12/20/2016         Buying         1.000%         (49)         -           12/20/2016         Selling         1.000%         (114)         -           12/20/2016         Buying         1.000%         (121)         -           12/20/2016         Buying         1.000%         (68)         -           12/20/2016         Buying         1.000%         (121)         -           08/20/2017         Selling         1.000%         (375)         -           12/20/2016         Buying         1.000%         (375)         -           12/20/2016         Buying         1.000%         (375)         -           12/20/2016         Buying         1.000%         (61)         -           12/20/2017         Selling         1.000%         (61)         -           12/20/2018         Selling         1.000%         (143)         -           12/20/2018         Selling         1.000%         (11)         -           12/20/2018         Selling         1.000%         (11)         -           12/20/2018         Selling         1.000%         (5)         -		· ·		(72)	-
12/20/2016         Selling         1.000%         (14)         -           12/20/2016         Buying         1.000%         (121)         -           12/20/2016         Buying         1.000%         (68)         -           12/20/2016         Buying         1.000%         81         -           09/20/2017         Selling         1.000%         (375)         -           12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         305         -           06/20/2017         Selling         1.000%         (61)         -           12/20/2016         Selling         1.000%         (3)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2016         Buying         1.000%         (5)         -		•	1.000%		-
12/20/2016         Buying         1.000%         (68)         -           12/20/2016         Buying         1.000%         (68)         -           09/20/2017         Selling         1.000%         (121)         -           12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         (375)         -           12/20/2016         Buying         1.000%         (61)         -           08/20/2017         Selling         1.000%         (3)         -           09/20/2016         Selling         1.000%         (143)         -           09/20/2017         Selling         5.000%         (143)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2011         Selling         1.000%         (1)         -           12/20/2016         Selling         1.000%         (5)         -           06/20/2017         Buying         1.000%         (5)         -           06/20/2016         Buying         1.000%         -         (223)     <	12/20/2016	Buying	1.000%	(49)	-
12/20/2016         Buying         1.000%         81           12/20/2016         Buying         1.000%         81           09/20/2017         Selling         1.000%         (121)           12/20/2016         Buying         5.000%         (375)           12/20/2016         Buying         1.000%         305           06/20/2017         Selling         1.000%         (61)           12/20/2016         Selling         1.000%         (3)           09/20/2017         Selling         5.000%         (65)           12/20/2016         Selling         5.000%         (65)           12/20/2016         Selling         1.000%         (1)           12/20/2016         Selling         1.000%         (1)           12/20/2016         Selling         1.000%         1           12/20/2017         Buying         1.000%         31         -           12/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (317           06/20/2016         Buling         1.000%         -	12/20/2016	Selling	1.000%	(14)	-
12/20/2016         Buying         1.000%         (121)         -           09/20/2017         Selling         1.000%         (121)         -           12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         305         -           06/20/2017         Selling         1.000%         (61)         -           12/20/2016         Selling         1.000%         (3)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2012         Selling         1.000%         (1)         -           12/20/2016         Selling         1.000%         (5)         -           12/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (1,211           06/20/2016         Buying         1.000%         -         1,211     <	12/20/2016	Buying	1.000%	(121)	-
09/20/2017         Selling         1.000%         (121)         -           12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         305         -           06/20/2017         Selling         1.000%         (61)         -           12/20/2016         Selling         1.000%         (143)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2016         Selling         1.000%         1         -           06/20/2017         Buying         1.000%         1         -           06/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         1.000%         -         1.211           06/20/2016         Selling         1.000%         6         -	12/20/2016	Buying	1.000%	(68)	-
12/20/2016         Buying         5.000%         (375)         -           12/20/2016         Buying         1.000%         305         -           06/20/2017         Selling         1.000%         (61)         -           12/20/2016         Selling         1.000%         (3)         -           09/20/2017         Selling         5.000%         (143)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2012         Selling         1.000%         (1)         -           12/20/2012         Selling         1.000%         1         -           12/20/2016         Selling         1.000%         31         -           12/20/2016         Selling         1.000%         5         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (273)           06/20/2016         Selling         1.000%         -         1.211           06/20/2016         Selling         1.000%         -         1.211           06/20/2017         Selling         1.000%         -         1.211 <td>12/20/2016</td> <td>Buying</td> <td>1.000%</td> <td>81</td> <td>-</td>	12/20/2016	Buying	1.000%	81	-
12/20/2016         Buying         1.000%         305         -           06/20/2017         Selling         1.000%         (61)         -           12/20/2016         Selling         1.000%         (3)         -           09/20/2017         Selling         5.000%         (143)         -           12/20/2016         Selling         1.000%         (65)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2012         Selling         1.000%         1         -           06/20/2017         Buying         1.000%         31         -           12/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         1,211           06/20/2017         Selling         1.000%         163         - <td>09/20/2017</td> <td>Selling</td> <td>1.000%</td> <td>(121)</td> <td>-</td>	09/20/2017	Selling	1.000%	(121)	-
06/20/2017         Selling         1.000%         (61)         -           12/20/2016         Selling         1.000%         (33)         -           09/20/2017         Selling         5.000%         (143)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2012         Selling         1.000%         (1)         -           06/20/2017         Buying         1.000%         31         -           06/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         (1917)           06/20/2016         Buying         1.000%         -         121           06/20/2016         Buying         1.000%         -         131           12/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           12/20/2012         Selling         1.000%         (14)         - <td>12/20/2016</td> <td>Buying</td> <td>5.000%</td> <td>(375)</td> <td>-</td>	12/20/2016	Buying	5.000%	(375)	-
12/20/2016         Selling         1.000%         (3)         -           09/20/2017         Selling         5.000%         (143)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2016         Selling         1.000%         (1)         -           12/20/2017         Buying         1.000%         1         -           06/20/2016         Selling         1.000%         31         -           12/20/2016         Selling         1.000%         -         (223)           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         1.000%         -         (223)           06/20/2016         Buying         1.000%         -         (223)           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         163         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         66         -	12/20/2016	Buying	1.000%	305	-
09/20/2017         Selling         5.000%         (143)         -           12/20/2016         Selling         5.000%         (65)         -           12/20/2012         Selling         1.000%         (1)         -           12/20/2012         Selling         1.000%         1         -           06/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         (917)           06/20/2016         Buying         1.000%         -         1321           06/20/2016         Buying         1.000%         -         1321           06/20/2016         Selling         1.000%         -         1331           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         192         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2016         Selling         1.000%         (60)         - <td>06/20/2017</td> <td>Selling</td> <td>1.000%</td> <td>(61)</td> <td>-</td>	06/20/2017	Selling	1.000%	(61)	-
12/20/2016         Selling         5,000%         (65)         -           12/20/2016         Selling         1,000%         (1)         -           12/20/2012         Selling         1,000%         1         -           06/20/2017         Buying         1,000%         31         -           12/20/2016         Selling         1,000%         (5)         -           06/20/2016         Buying         5,000%         -         (223)           06/20/2016         Buying         5,000%         -         (917)           06/20/2016         Buying         1,000%         -         1917)           06/20/2016         Buying         1,000%         -         1,211           06/20/2016         Selling         1,000%         -         131           12/20/2012         Selling         5,000%         163         -           06/20/2017         Selling         5,000%         103         -           12/20/2012         Selling         1,000%         (14)         -           12/20/2012         Selling         1,000%         (14)         -           12/20/2016         Selling         1,000%         (60)         -	12/20/2016	Selling	1.000%	(3)	-
12/20/2016         Selling         1.000%         (1)         -           12/20/2012         Selling         1.000%         1         -           06/20/2017         Buying         1.000%         31         -           12/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         192         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         132         -           12/20/2016         Selling         1.000%         100         -           12/20/2016         Selling         1.000%         (261)         -	09/20/2017	Selling	5.000%	(143)	-
12/20/2012         Selling         1.000%         31         -           06/20/2017         Buying         1.000%         31         -           12/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Selling         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         163         -           12/20/2012         Selling         5.000%         163         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         132         -           12/20/2012         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (261)         - </td <td>12/20/2016</td> <td>Selling</td> <td>5.000%</td> <td>(65)</td> <td>-</td>	12/20/2016	Selling	5.000%	(65)	-
06/20/2017         Buying         1.000%         31         -           12/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Selling         1.000%         -         1.211           06/20/2012         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         132         -           12/20/2016         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (60)         -           06/20/2017         Selling         1.000%         (261)         -           12/20/2016         Selling         1.000%         4         -           12/20/2012         Selling         1.000%         4         -	12/20/2016	Selling	1.000%	(1)	-
12/20/2016         Selling         1.000%         (5)         -           06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         132         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (60)         -           12/20/2016         Selling         1.000%         (261)         -           12/20/2017         Selling         1.000%         (261)         -           12/20/2016         Selling         1.000%         (261)         -           12/20/2016         Buying         1.000%         4         -	12/20/2012	Selling	1.000%	1	-
06/20/2016         Buying         5.000%         -         (223)           06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (60)         -           12/20/2016         Selling         1.000%         (60)         -           12/20/2016         Selling         1.000%         (261)         -           12/20/2012         Selling         1.000%         (261)         -           12/20/2016         Selling         1.000%         260         -           12/20/2012         Selling         1.000%         4         -           12/20/2016         Buying         1.000%         (28)         - <td>06/20/2017</td> <td>Buying</td> <td>1.000%</td> <td>31</td> <td>-</td>	06/20/2017	Buying	1.000%	31	-
06/20/2016         Buying         5.000%         -         (917)           06/20/2016         Buying         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         1.000%         132         -           12/20/2016         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (66)         -           12/20/2016         Selling         1.000%         (261)         -           12/20/2012         Selling         1.000%         4         -           12/20/2012         Selling         1.000%         2         -           12/20/2016         Buying         1.000%         280         -           12/20/2016         Buying         1.000%         280         -	12/20/2016	Selling	1.000%	(5)	-
06/20/2016         Buying         1.000%         -         1,211           06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2016         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (60)         -           12/20/2016         Selling         1.000%         (261)         -           12/20/2017         Selling         1.000%         (261)         -           12/20/2012         Selling         1.000%         2         -           12/20/2012         Selling         1.000%         4         -           12/20/2016         Buying         1.000%         260         -           12/20/2016         Buying         1.000%         (28)         -           12/20/2016         Selling         1.000%         (28)         -	06/20/2016	Buying	5.000%	-	(223)
06/20/2016         Selling         1.000%         -         131           12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         5.000%         132         -           12/20/2016         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (261)         -           12/20/2017         Selling         1.000%         (261)         -           12/20/2012         Selling         1.000%         2         -           12/20/2012         Selling         1.000%         4         -           12/20/2016         Buying         1.000%         81         -           12/20/2016         Buying         1.000%         (28)         -           12/20/2016         Selling         1.000%         (28)         -           12/20/2016         Selling         1.000%         (253)         -	06/20/2016	Buying	5.000%	-	(917)
12/20/2012         Selling         5.000%         163         -           06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         5.000%         132         -           12/20/2016         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (80)         -           06/20/2017         Selling         1.000%         (261)         -           12/20/2012         Selling         1.000%         2         -           12/20/2012         Selling         1.000%         4         -           12/20/2016         Buying         1.000%         260         -           12/20/2016         Buying         1.000%         81         -           12/20/2016         Buying         1.000%         (28)         -           12/20/2016         Selling         1.000%         (28)         -           12/20/2012         Selling         1.000%         (253)         -	06/20/2016	Buying	1.000%	-	1,211
06/20/2017         Selling         5.000%         902         -           12/20/2012         Selling         1.000%         (14)         -           12/20/2012         Selling         5.000%         132         -           12/20/2016         Selling         1.000%         56         -           12/20/2016         Selling         1.000%         (100)         -           12/20/2016         Selling         1.000%         (261)         -           06/20/2017         Selling         1.000%         (261)         -           12/20/2012         Selling         1.000%         2         -           12/20/2012         Selling         1.000%         4         -           12/20/2016         Buying         1.000%         260         -           12/20/2016         Buying         1.000%         (28)         -           12/20/2016         Selling         1.000%         (28)         -           12/20/2016         Selling         1.000%         (28)         -           12/20/2012         Selling         1.000%         (253)         -           06/20/2021         Selling         1.000%         (40)         - <td>06/20/2016</td> <td>Selling</td> <td>1.000%</td> <td>-</td> <td>131</td>	06/20/2016	Selling	1.000%	-	131
12/20/2012       Selling       1.000%       (14)       -         12/20/2012       Selling       5.000%       132       -         12/20/2016       Selling       1.000%       56       -         12/20/2016       Selling       1.000%       (100)       -         12/20/2016       Selling       1.000%       (60)       -         06/20/2017       Selling       1.000%       (261)       -         12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       (28)       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       (253)       -         06/20/2021       Selling       1.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2016       Selling       1.000%       (4)       - <td< td=""><td>12/20/2012</td><td>Selling</td><td>5.000%</td><td>163</td><td>-</td></td<>	12/20/2012	Selling	5.000%	163	-
12/20/2012       Selling       5.000%       132       -         12/20/2016       Selling       1.000%       56       -         12/20/2016       Selling       1.000%       (100)       -         12/20/2016       Selling       1.000%       (261)       -         06/20/2017       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       (253)       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       9       -         09/20/2013       Selling       1.000%       9       -         12/20/2016       Selling       1.000%       (4)       -	06/20/2017	Selling	5.000%	902	-
12/20/2016       Selling       1.000%       56       -         12/20/2016       Selling       1.000%       (100)       -         12/20/2016       Selling       1.000%       (60)       -         06/20/2017       Selling       1.000%       (261)       -         12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       9       -         09/20/2013       Selling       1.000%       9       -         12/20/2016       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20	12/20/2012	Selling	1.000%	(14)	-
12/20/2016       Selling       1.000%       (100)       -         12/20/2016       Selling       1.000%       (60)       -         06/20/2017       Selling       1.000%       (261)       -         12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       9       -         09/20/2013       Selling       1.000%       9       -         12/20/2016       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2016       Selling       1.000%       (1)       -         12/2	12/20/2012	Selling	5.000%		-
12/20/2016       Selling       1.000%       (60)       -         06/20/2017       Selling       1.000%       (261)       -         12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -	12/20/2016	_	1.000%		-
06/20/2017       Selling       1.000%       (261)       -         12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2016       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2016       Selling       1.000%       (2)       -	12/20/2016	Selling	1.000%	(100)	-
12/20/2012       Selling       1.000%       2       -         12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2016       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2016       Selling       1.000%       2       -	12/20/2016	Selling	1.000%		-
12/20/2012       Selling       1.000%       4       -         12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2016       Selling       1.000%       2       -		_	1.000%	(261)	-
12/20/2016       Buying       1.000%       260       -         12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2016       Selling       1.000%       2       -	12/20/2012	Selling	1.000%	2	-
12/20/2016       Buying       1.000%       81       -         12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -		•			-
12/20/2016       Selling       1.000%       (28)       -         12/20/2012       Selling       1.000%       9       -         06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -		Buying			-
12/20/2012       Selling       1.000%       9         06/20/2021       Selling       1.000%       (253)         03/20/2014       Selling       5.000%       (40)         12/20/2016       Buying       1.000%       42         09/20/2013       Selling       1.000%       9         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -	12/20/2016	Buying			-
06/20/2021       Selling       1.000%       (253)       -         03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -		_			-
03/20/2014       Selling       5.000%       (40)       -         12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -		0			-
12/20/2016       Buying       1.000%       42       -         09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -		•			-
09/20/2013       Selling       1.000%       9       -         12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -		•			-
12/20/2013       Selling       5.000%       (4)       -         12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -					-
12/20/2016       Selling       1.000%       (1)       -         12/20/2012       Selling       1.000%       2       -					-
12/20/2012 Selling 1.000% 2 -					-
		· ·			-
12/20/2012 Selling 1.000% 2 -		•			-
	12/20/2012	Selling	1.000%	2	-

# FIGURE 2.23 - SWAPS, cont.

AS OF JUNE 30

AS OF JUNE 30	Notional		Counterparty
Counterparty	Amount	VRS Rate	Rate
Deutsche Bank AG	200		
Deutsche Bank AG/London	6,800		
Deutsche Bank AG/London	7,750		
Deutsche Bank AG/London	200		
Deutsche Bank AG/London	500		
Deutsche Bank AG/London	2,000		
Deutsche Bank AG/London	2,100		
Deutsche Bank AG/London	2,300		
Deutsche Bank AG/London	3,600		
Deutsche Bank AG/London	5,000		
Deutsche Bank AG/London	2,180		
Goldman Sachs Group Inc/The	11,100		
Goldman Sachs Group Inc/The	7,750		
Goldman Sachs Group Inc/The	6,726		
Goldman Sachs Group Inc/The	6,600		
Goldman Sachs Group Inc/The	6,000		
Goldman Sachs Group Inc/The	5,800		
Goldman Sachs Group Inc/The	5,800		
Goldman Sachs Group Inc/The	5,400		
Goldman Sachs Group Inc/The	5,275		
Goldman Sachs Group Inc/The	5,000		
Goldman Sachs Group Inc/The	4,375		
Goldman Sachs Group Inc/The	4,000		
Goldman Sachs Group Inc/The	3,950		
Goldman Sachs Group Inc/The	3,200		
Goldman Sachs Group Inc/The	3,160		
Goldman Sachs Group Inc/The	3,150		
Goldman Sachs Group Inc/The	2,900		
Goldman Sachs Group Inc/The	2,650		
Goldman Sachs Group Inc/The	2,500		
Goldman Sachs Group Inc/The	2,500		
Goldman Sachs Group Inc/The	2,000		
Goldman Sachs Group Inc/The	2,000		
Goldman Sachs Group Inc/The	2,000		
Goldman Sachs Group Inc/The	1,800		
Goldman Sachs Group Inc/The	1,777		
Goldman Sachs Group Inc/The	1,600		
Goldman Sachs Group Inc/The	1,500		
Goldman Sachs Group Inc/The	1,500		
Goldman Sachs Group Inc/The	1,400		
Goldman Sachs Group Inc/The	1,300		
Goldman Sachs Group Inc/The	1,269		
Goldman Sachs Group Inc/The	1,269		
Goldman Sachs Group Inc/The	1,000		
Goldman Sachs Group Inc/The	1,000		
Goldman Sachs Group Inc/The	952		
Goldman Sachs Group Inc/The	900		
•	800		
Goldman Sachs Group Inc/The	δυυ		

Maturity Date	Buying/Selling Protection	Pay/Receive Rate	Market Value 2012	Market Value 2011
12/20/2012	Selling	1.000%	\$ -	-
06/20/2021	Selling	1.000%	-	(295)
06/20/2016	Selling	5.000%	_	1,015
09/20/2015	Selling	1.000%	_	3
06/20/2021	Selling	1.000%	_	(19)
03/20/2015	Selling	1.000%	_	(13)
09/20/2014	Selling	5.000%	_	269
06/20/2015	Selling	1.000%	_	(35)
12/20/2015	Selling	1.000%	_	80
06/20/2015	Selling	1.000%	_	(21)
06/20/2018	Selling	1.000%	_	(93)
06/20/2017	Selling	1.000%	(67)	-
06/20/2017	Selling	5.000%	752	_
12/20/2016	Buying	1.000%	370	-
03/20/2013	Selling	5.000%	169	_
12/20/2016	Selling	1.000%	(7)	-
12/20/2016	Buying	Variable Rate	398	_
12/20/2016	Buying	Variable Rate	459	-
12/20/2016	Buying	1.000%	108	_
06/20/2017	Selling	0.250%	(182)	_
12/20/2016	Buying	1.000%	174	_
06/20/2013	Selling	1.000%	(75)	_
12/20/2016	Selling	1.000%	(195)	_
09/20/2017	Selling	1.000%	(349)	_
12/20/2016	Selling	1.000%	(26)	_
03/20/2014	Selling	5.000%	91	_
12/20/2016	Buying	1.000%	1	-
12/20/2016	Selling	5.000%	(229)	-
06/20/2017	Selling	1.000%	(132)	_
12/20/2016	Buying	1.000%	165	_
12/20/2016	Selling	5.000%	(28)	_
09/20/2017	Buying	1.000%	21	-
09/20/2017	Buying	1.000%	36	-
12/20/2016	Selling	1.000%	(206)	-
12/20/2016	Selling	1.000%	(348)	-
03/20/2017	Buying	3.000%	119	-
03/20/2014	Selling	5.000%	46	-
12/20/2012	Selling	1.000%	1	-
03/20/2014	Selling	5.000%	60	-
09/20/2016	Selling	5.000%	46	-
12/20/2013	Selling	5.000%	37	-
09/20/2017	Buying	1.000%	72	-
09/20/2017	Buying	1.000%	72	-
09/20/2017	Buying	1.000%	75	-
09/20/2017	Buying	1.000%	38	-
12/20/2016	Selling	1.000%	(197)	-
06/20/2017	Selling	5.000%	(25)	-
12/20/2012	Selling	1.000%	2	-
• •	3	•		

# FIGURE 2.23 - SWAPS, cont.

OF JUNE 30	Notional	V/DO D :	Counterparty
Counterparty	Amount	VRS Rate	Rate
Goldman Sachs Group Inc/The	800		
Goldman Sachs Group Inc/The	300		
Goldman Sachs Bank USA/New York NY	544		
Goldman Sachs Bank USA/New York NY	1,200		
Goldman Sachs Bank USA/New York NY	3,600		
Goldman Sachs Bank USA/New York NY	3,827		
Goldman Sachs Bank USA/New York NY	5,401		
Goldman Sachs Bank USA/New York NY	15,560		
Goldman Sachs International	500		
Goldman Sachs International	1,100		
UBS AG	7,350		
UBS AG	6,000		
UBS AG	1,850		
UBS AG	1,600		
UBS AG	200		
UBS AG/London	11,850		
UBS AG/Stamford CT	1,850		
UBS AG/Stamford CT	4,475		
Total Credit Default Swaps	\$ 504,943		
ation Swaps:			
Merrill Lynch Capital Services	\$10,000	US CPI Urban Consumer NSA	3.2700%
		oo of Forball consumer 140/1	0.27 00 70
Total Inflation Swaps	\$10,000	OO OF FORBUT CONSUMER TWO/T	0.2, 00,0
		oo on onbuin consumer work	<u> </u>
Total Inflation Swaps		1.08875%	
Total Inflation Swaps erest Rate Swaps:	\$10,000		
Total Inflation Swaps erest Rate Swaps: Credit Suisse Group AG	<b>\$10,000</b> \$45,000	1.08875%	3-month USD LIBO
Total Inflation Swaps  erest Rate Swaps: Credit Suisse Group AG Credit Suisse Group AG	<b>\$10,000</b> \$45,000 21,873	1.08875% Brazil Cetip Interbank Deposit	3-month USD LIBO 8.97%
Total Inflation Swaps  erest Rate Swaps: Credit Suisse Group AG Credit Suisse Group AG Credit Suisse Group AG	\$10,000 \$45,000 21,873 18,680	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit	3-month USD LIB0 8.97% 7.98%
Total Inflation Swaps  erest Rate Swaps: Credit Suisse Group AG	\$10,000 \$45,000 21,873 18,680 11,274	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing	3-month USD LIBO 8.97% 7.98% 3.33% 3.39%
Total Inflation Swaps  erest Rate Swaps: Credit Suisse Group AG	\$45,000 21,873 18,680 11,274 10,077	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing	3-month USD LIBO 8.97% 7.98% 3.33% 3.39%
Total Inflation Swaps  erest Rate Swaps: Credit Suisse Group AG	\$45,000 21,873 18,680 11,274 10,077 6,800	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO
Total Inflation Swaps  erest Rate Swaps: Credit Suisse Group AG	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20%
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Coldman Sachs Group Inc	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO
Total Inflation Swaps  Berest Rate Swaps: Credit Suisse Group AG Coldman Sachs Group Inc Goldman Sachs Group Inc	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Coldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month USD LIBO 3-month LIBOR
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Coldman Sachs Group Inc Goldman Sachs Bank USA/New York NY Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3.41%
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Coldman Sachs Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY Goldman Sachs Bank USA/New York NY	\$10,000 \$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3-month LIBOR 3.41% 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY Goldman Sachs Bank USA/New York NY Goldman Sachs Bank USA/New York NY	\$10,000 \$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3.41% 3-month USD LIBO 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500 6,000	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40% 3.37% 4.2825%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3.41% 3-month USD LIBO 3-month USD LIBO 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500 6,000 6,800	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40% 3.37% 4.2825% 2.18%	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3.41% 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500 6,000 6,800 7,200	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40% 3.37% 4.2825% 2.18% 3-month USD LIBOR	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3-month USD LIBO 3.3%
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500 6,000 6,800 7,200 10,000	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40% 3.37% 4.2825% 2.18% 3-month USD LIBOR 3-month USD LIBOR	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3.41% 3-month USD LIBO
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500 6,000 6,800 7,200 10,000 11,000	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40% 3.37% 4.2825% 2.18% 3-month USD LIBOR 0.66%	3-month USD LIBC 8.97% 7.98% 3.33% 3.39% 3-month USD LIBC 6.35% 6.20% 3-month USD LIBC 3-month LIBOR 3-month LIBOR 3-month USD LIBC 3.3% 3.32% 3-month USD LIBC
Total Inflation Swaps  Perest Rate Swaps: Credit Suisse Group AG Credit Suisse Group Inc Goldman Sachs Group Inc Goldman Sachs Bank USA/New York NY	\$45,000 21,873 18,680 11,274 10,077 6,800 6,703 3,873 25,000 25,000 500 1,700 2,900 3,300 4,500 6,000 6,800 7,200 10,000	1.08875% Brazil Cetip Interbank Deposit Brazil Cetip Interbank Deposit 3-month Malaysia Interbank Fixing 2.75% Mexico Interbank 28 day Index Mexico Interbank 28 day Index 1.26% 1.25% 4.09% 2.0975% 3-month LIBOR 2.40% 3.37% 4.2825% 2.18% 3-month USD LIBOR 3-month USD LIBOR	3-month USD LIBO 8.97% 7.98% 3.33% 3.39% 3-month USD LIBO 6.35% 6.20% 3-month USD LIBO 3-month LIBOR 3-month LIBOR 3-month LIBOR 3-month USD LIBO 3.3%

Maturity Date	Buying/Selling Protection	Pay/Receive Rate	Market Value 2012	Market Value 2011
12/20/2012 12/20/2012 06/20/2016 06/20/2012 06/20/2016 06/20/2016 06/20/2016 06/20/2016 03/20/2016 06/20/2016	Selling Selling Selling Buying Selling Selling Selling Buying Selling Selling	1.000% 1.000% 1.000% Variable Rate 1.000% 1.000% 1.000% 1.000% 1.000%	\$ 2	(2) (1) (60) (10) (14) (58) (16)
06/20/2017 06/20/2021 09/20/2016 06/20/2015 12/20/2012 06/20/2021 09/20/2016 12/20/2013	Buying Selling Selling Selling Selling Selling Selling Selling Buying	1.000% 1.000% 1.000% 5.000% 1.000% 1.000% 1.800%	(42) (502) (339) 49 - - -	- - - (775) (182) (115)
07/05/21			\$ 3,632 \$ - \$ -	\$ (130) \$ (19) (19)
02/14/2017 01/02/2015 01/02/2014 01/20/2017 05/09/2017 06/20/2042 04/11/2022 06/07/2022 10/03/2016 10/03/2016 05/24/2041 05/23/2016 03/18/2021 03/08/2016 10/05/2040 04/19/2041 01/13/2016 05/06/2021 05/23/2021 06/29/2013 06/29/2013 01/25/2013 03/03/2013			\$ (384) 246 18 68 85 (366) 264 98 456 456  - - - - - -	- - - - - - (2) (11) 50 (78) 541 (231) (110) 43 76 3 6 (114) (169)

# FIGURE 2.23 - SWAPS, cont.

AS OF JUNE 30	Madanal		0
Counterparty	Notional Amount	VRS Rate	Counterparty Rate
UBS AG	71,713	Brazil Cetip Interbank Deposit	
UBS AG	59,452	Brazil Cetip Interbank Deposit	
UBS AG	29,793	Mexico Interbank 28 day Index	
UBS AG	18,331	Brazil Cetip Interbank Deposit	
UBS AG	16,944	Brazil Cetip Interbank Deposit	
UBS AG	7,431	Brazil Cetip Interbank Deposit	
UBS AG	5,758	Mexico Interbank 28 day Index	
UBS AG	5,072	Mexico Interbank 28 day Index	
UBS AG	3,567	Brazil Cetip Interbank Deposit	11.83%
UBS AG/Stamford CT	12,378	JIBA3M INDEX	8.45%
UBS AG/Stamford CT	47,212	6.75%	JIBA3M INDEX
UBS AG/Stamford CT	38,970	0.00%	3-month USD LIBOR
Total Interest Rate Swaps	\$615,401		
Total Return Swaps:			
Blackrock Advisors UK Ltd	61,900	1-month LIBOR +22 bps	BRCLYS Fixed Rate MBS
Credit Suisse AG	97,748	1-month LIBOR -16 bps	MSCI Daily EAFE Canada
Deutsche Bank AG/London	7,003	1-month LIBOR	IOS FN30 450.10
Goldman Sachs Group Inc	704,400	0.47%	MSCI AC World Index IMI
Goldman Sachs Bank USA/New York NY	145	1-month LIBOR	FL US Tbill
Goldman Sachs Bank USA/New York NY	726	1-month LIBOR	IOS FN30 450.09
Goldman Sachs Bank USA/New York NY	2,813	1-month LIBOR	IOS FN30 600.08
Goldman Sachs International	237,298	3-month LIBOR + 55 bps	MSCI AC World Index IMI
UBS AG/Stamford CT	43,600	1-month LIBOR + 15 bps	BRCLYS Fixed Rate MBS
UBS AG/Stamford CT	61,800	3-month LIBOR + 26 bps	BRCLYS Fixed Rate MBS
UBS AG/Stamford CT	277,212	•	MSCI Daily EAFE Canada USD
Total Return Swaps	\$1,494,645		
Total Swaps	\$2,624,989		
r -			

				(DOLL/III	O EXTITEOUED T	11100071110007
Maturity Date	Buying/Selling Protection	Pay/Receive Rate	M	arket Value 2012	Ma	arket Value 2011
01/02/2014			\$	51		
01/02/2014			Φ	2,264		-
06/08/2016				788		-
07/01/2013				438		_
07/01/2013				386		_
01/02/2014				32		_
09/06/2016				108		_
09/02/2022				336		_
01/02/2013				104		_
03/31/2021				-		235
03/31/2013				_		(290)
02/15/2025				_		(3,013)
02/10/2020			<del></del>	F 440	•	
			\$	5,448	\$	(3,064)
09/30/2011			\$	-	\$	_
08/31/2011			·	-		(1,286)
01/12/2041				_		47
04/02/2013				(340)		_
01/12/2040				-		1
01/12/2040				-		-
01/12/2039				-		-
03/31/2012				-		(26)
07/31/2011				-		31
12/31/2011				-		-
11/30/2011				-		(4,018)
			\$	(340)	\$	(5,251)
			\$	8,740	\$	(8,464)
			<b>•</b>	0,740	φ ====	(0,404)



# 6. Capital Assets

The System's non-depreciable and depreciable capital assets for the year ended June 30, 2012 and the changes by category from the prior fiscal year end are presented in Figure 2.24.

FIGURE 2.24 - PROPERTY, PLANT, FURNITURE, EQUIPMENT AND INTANGIBLE ASSETS

FOR THE YEAR ENDED JUNE 30, 2012						(EXPF	RESSED IN	THOUSANDS)
		alance			5			alance
	June	30, 2011	Inc	reases	Decr	eases	June	e 30, 2012
Non-Depreciable Capital Assets:								
Land	\$	1,368	\$	-	\$	-	\$	1,368
Construction in progress		16,722		5,974				22,696
Total Non-Depreciable Capital Assets		18,090		5,974		-		24,064
Depreciable Capital Assets:								
Building		4,632		-		-		4,632
Furniture and Equipment		4,870		762				5,632
Total Depreciable Capital Assets		9,502		762		-		10,264
Less Accumulated Depreciation:								
Building		1,505		115		-		1,620
Furniture and Equipment		2,923		523				3,446
Total Accumulated Depreciation		4,428		638		-		5,066
Total Depreciable Capital Assets - Net		5,074		124		-		5,198
Total Net Capital Assets	\$	23,164	\$	6,098	\$	-	\$	29,262

Depreciation expense amounted to \$639,000 and \$652,000 in 2012 and 2011, respectively.

# 7. Operating Leases

The System has commitments under various operating leases for office space and parking. In general, the leases are for a 10-year term. In most cases, the System expects that in the normal course of business, these leases will be replaced by similar leases. Total rental expense for the year ended June 30, 2012 was \$2,399,000. The System's total future minimum rental payments as of June 30, 2012 are presented in Figure 2.25.

# FIGURE 2.25 – OPERATING LEASES-FUTURE PAYMENTS

ount
811
830
852
873
596
,962

# 8. System Employee Benefit Plan Obligations

All full-time permanent, salaried employees of the System are employees of the Commonwealth of Virginia and included in the Commonwealth's participation as an employer in VRS. The Commonwealth, not the System, has overall responsibility for contributions to the VRS pension trust fund as well as other employee benefit and post-employment benefit trust funds for System employees. The state's contribution requirement for general employees for the year ended June 30, 2012 was 2.08% of covered payroll for the first nine months of the fiscal year and 6.58% of covered payroll for the last quarter of the year. For FY 2011, the contribution requirement for general employees was 2.13% of covered payroll for the entire fiscal year. There were approximately 48,431 state retirees, including System retirees, at June 30, 2012. Note 2.B provides information on the state's contribution toward funding the defined benefit plan for state employees for FY 2012 and FY 2011. As set forth in the 2010 Appropriation Act (Item 469, Chapter 874, 2010 Virginia Acts of Assembly) and confirmed in the 2011 Appropriation Act (Item 469, Chapter 890, 2011 Virginia Acts of the Assembly) and the 2012 Appropriation Act (Item 469, Chapter 2, 2012 Special Session I Virginia Acts of Assembly), all state employers were charged 6.58% of covered payroll for retirement for their general employees. The difference between the 6.58% charged and the 2.13% transferred to the plan for FY 2011 and the 6.58% charged and the 2.08% transferred to VRS for the first nine months of FY 2012, with a few exceptions, was retained in the General Fund of the Commonwealth. This is discussed further in Note 12. Because the assets of the System are held in trust for the exclusive benefit of the beneficiaries of the programs, the System was able to recover \$1,582,000 in FY 2012, representing the difference in these rates for FY 2011 and FY 2012. This recovery was recorded as Miscellaneous Revenue. The System's contribution requirement for its employees for FY 2012 and FY 2011 was \$1,415,000 and \$1,287,000, respectively.

The System's financial obligations for other employee benefit and post-employment benefit plans were as follows:

- The state's contribution requirement for the Group Life Insurance Program for the years ended June 30, 2012 and 2011 was 0.28% of covered payroll. The full alternate contribution rate of 1.02% was contributed for the last half of June 2012. There were approximately 89,539 active state employees and 45,481 state retirees, including System employees and retirees, eligible for group life insurance coverage at June 30, 2012. As set forth in the 2010 Appropriation Act (Item 469, Chapter 874, 2010 Virginia Acts of Assembly) and confirmed in the 2011 Appropriation Act (Item 469, Chapter 890, 2011 Virginia Acts of the Assembly) and the 2012 Appropriation Act (Item 469, Chapter 2, 2012 Special Session I Virginia Acts of Assembly), all state employers were charged 1.02% of covered payroll for group life insurance. The difference between the 1.02% charged and the 0.28% transferred to VRS for all of FY 2011 and FY 2012 except the last half of June 2012, with a few exceptions, was retained in the General Fund of the Commonwealth. This is discussed further in Note 12. Because the assets of the System are held in trust for the exclusive benefit of the beneficiaries of the programs, the System was able to recover \$296,000 in FY 2012, representing the difference in these rates for FY 2011 and FY 2012. This recovery was recorded as Miscellaneous Revenue. The System's contribution requirement for its employees and retirees for FY 2012 and FY 2011 was \$219,000 and \$203,000, respectively.
- The state's contribution requirement for the Retiree Health Insurance Credit Program for the years ended June 30, 2012 and 2011 was 0.10% of covered payroll. The full alternate contribution rate of 0.99% was contributed for the last half of June 2012. There were approximately 38,615 state retirees, including System retirees, receiving the health insurance credit at June 30, 2012. As set forth in the 2010 Appropriation Act (Item 469, Chapter 874, 2010 Virginia Acts of

Assembly) and confirmed in the 2011 Appropriation Act (Item 469, Chapter 890, 2011 Virginia Acts of the Assembly) and the 2012 Appropriation Act (Item 469, Chapter 2, 2012 Special Session I Virginia Acts of Assembly), all state employers were charged 0.99% of covered payroll for the health insurance credit. The difference between the 0.99% charged and the 0.10% transferred to VRS for all of FY 2011 and FY 2012 except the last half of June 2012, with a few exceptions, was retained in the General Fund of the Commonwealth. This is discussed further in Note 12. Because the assets of the System are held in trust for the exclusive benefit of the beneficiaries of the programs, the System was able to recover \$355,000 in FY 2012, representing the difference in these rates for FY 2011 and FY 2012. This recovery was recorded as Miscellaneous Revenue. The System's contribution requirement for its employees for FY 2012 and FY 2011 was \$212,000 and \$194,000, respectively.

The state's contribution requirement for the Virginia Sickness and Disability Program (VSDP) for the years ended June 30, 2012 and 2011 was zero (0.00%) of covered payroll. The full alternate contribution rate of 0.66% was contributed for the last half of June 2012. There were approximately 76,349 state employees, including System employees, enrolled in VSDP at June 30, 2012. As set forth in the 2010 Appropriation Act (Item 469, Chapter 874, 2010 Virginia Acts of Assembly) and confirmed in the 2011 Appropriation Act (Item 469, Chapter 890, 2011 Virginia Acts of the Assembly) and the 2012 Appropriation Act (Item 469, Chapter 2, 2012 Special Session I Virginia Acts of Assembly), all state employers were charged 0.66% of covered payroll for VSDP. The difference between the 0.66% charged and zero (0.00%) transferred to VRS for all of FY 2011 and FY 2012 except the last half of June 2012, with a few exceptions, was retained in the General Fund of the Commonwealth. This recovery was recorded as Miscellaneous Revenue. Because the assets of the System are held in trust for the exclusive benefit of the beneficiaries of the programs, the System was able to recover \$264,000 in FY 2012, representing the difference in these rates for FY 2011 and FY 2012. This is discussed further in Note 12. The System's contribution requirement for its employees for FY 2012 and FY 2011 was \$140,000 and \$129,000, respectively.

Information regarding the Commonwealth's funding progress is presented in the Commonwealth's Comprehensive Annual Financial Report. Information about the pension plans is provided in Note 2; information about other employee and post-employment benefit plans is provided in Note 3.

# 9. Litigation

The System, including its Board of Trustees, officers and employees, is a defendant in claims and lawsuits that are pending, are in progress or have been settled since June 30, 2012. The Attorney General and outside counsel have reviewed the status of these claims, lawsuits and the System's potential liability arising from them. Based on their review, it is the opinion of management that such liability, if any, would have no material adverse effect on the System's financial condition.

# 10. Risk Management

To cover its exposure to various risks of loss, the System, as an independent agency of the Commonwealth of Virginia, participates in the Commonwealth's self-insurance programs for state employee health care and risk management. The latter program includes property, general (tort) liability, medical malpractice and automobile plans. The System's employees are covered by the Virginia Workers' Compensation Program administered by the Department of Human Resource Management. In addition, the System is self-insured for fiduciary liability as well as directors' and officers' liability under a program administered by the Commonwealth's Division of Risk Management. There were no claims in excess of coverage and no reductions in coverage during FY 2012 and the three preceding fiscal years.

### 11. Commitments

The System extends investment commitments in the normal course of business. At June 30, 2012 and 2011, these commitments amounted to \$3,370,248,000 and \$3,480,067,000, respectively.

# 12. Statutory Contribution Adjustment

For FY 2011, pension contributions due or required were based on the June 30, 2009 actuarial valuation, which used a 20-year funding period for the UAAL. The General Assembly again funded less than the rate determined by the actuary by extending the funding period for these groups from 20 years to 30 years, increasing the investment return assumption from 7.50% to 8.00% and increasing the inflation assumption from 2.50% to 3.00%. In addition, only the employer normal cost of the rate was funded, and this was reduced by a factor representing the savings associated with the adoption of the revised benefit provisions of Plan 2. As a result, the FY 2011 employer rate for teachers was reduced from 12.91% to 3.93% and for state employees from 8.46% to 2.13%. Additionally, the employer rates for SPORS, VaLORS and JRS were reduced from the actuary's recommended rates of 25.56%, 15.93% and 46.79% to 7.76%, 5.12% and 28.81%, respectively. There was no adjustment to the employer contribution rate for political subdivision employers or to the member contribution rate of 5.00%.

For FY 2011, other post-employment benefit plan contributions due or required also were based on the June 30, 2009 actuarial valuation, which used a 27-year funding period for the UAAL. The General Assembly again funded less than the rates determined by the actuary by extending the funding period for each of the plans from 27 years to 30 years, increasing the investment return assumption from 7.50% to 8.00% and increasing the inflation assumption from 2.50% to 3.00%. In addition, the actual funding was based on only a portion of that rate. As a result, the FY 2011 employer rate for the Group Life Insurance Program was reduced from 1.11% to 0.28% and for VSDP from 0.75% to zero (0.00%). Additionally, for the Retiree Health Insurance Credit Program, the state employer rate was reduced from 1.06% to 0.10% and the teacher employer rate from 1.08% to 0.60%. There was no adjustment to the Retiree Health Insurance Credit Program employer contribution rate for political subdivision employers.

For FY 2012, pension contributions due or required were based on the June 30, 2009 actuarial valuation, which used a 20-year funding period for the UAAL. The General Assembly again funded less than the

rate determined by the actuary by extending the funding period for these groups from 20 years to 30 years, increasing the investment return assumption from 7.50% to 8.00% and increasing the inflation assumption from 2.50% to 3.00%. In addition, for state employees, only the employer normal cost of the rate was funded for the first nine months of the fiscal year, and this was reduced by a factor representing the savings associated with the adoption of the revised benefit provisions of Plan 2. As a result, the FY 2012 employer rate for state employees was reduced from 8.46% to 2.08% for the first nine months of the fiscal year and then increased to 6.58% for the last quarter of the year. Additionally, the employer rates for SPORS, VaLORS and JRS were reduced from the actuary's recommended rates of 25.56%, 15.93% and 46.79% to 7.73%, 5.07% and 28.65%, respectively, for the first nine months of the fiscal year and then increased to 21.16%, 13.09% and 42.58%, respectively, for the last quarter. The employer contribution rate for teachers was reduced from 12.91% to 6.33%. There was no adjustment to the employer contribution rate for political subdivision employers or to the member contribution rate of 5.00%.

For FY 2012, other post-employment benefit plan contributions due or required also were based on the June 30, 2009 actuarial valuation, which used a 27-year funding period for the UAAL. The General Assembly again funded less than the rates determined by the actuary by extending the funding period for each of the plans from 27 years to 30 years, increasing the investment return assumption from 7.50% to 8.00% and increasing the inflation assumption from 2.50% to 3.00%. In addition, the actual funding was based on only a portion of that rate. As a result, the FY 2012 employer rate for the Group Life Insurance Program was reduced from 1.11% to 0.28% and for VSDP from 0.75% to zero (0.00%). Additionally, for the Retiree Health Insurance Credit Program, the state employer rate was reduced from 1.06% to 0.10% and the teacher employer rate from 1.08% to 0.60%. The Commonwealth did contribute 1.02%, 0.99% and 0.66% of covered payroll, respectively, for the Group Life Insurance Program, the Retiree Health Insurance Credit and VSDP for the last half of June 2012. There was no adjustment to the Retiree Health Insurance Credit Program employer contribution rate for political subdivision employers.

### REQUIRED SUPPLEMENTAL SCHEDULE OF FUNDING PROGRESS - PENSION PLANS

(DOLLARS IN MILLIONS) Actuarial UAAL as a Accrued Percentage Actuarial Actuarial Liability Unfunded of Covered Valuation Date Value of (AAL) -AAL (UAAL) Funded Covered Payroll June 30 Assets (a) Entry Age (b) (b-a) Ratio (a/b) Payroll (c) (b-a)/(c)Virginia Retirement System (VRS)\*\* 14,709 2011 \$ 52,559 \$ 75,185 \$ 22,626 69.9% \$ 153.8% 72,801 20,072 2010 52.729 72.4% 14.758 136.0% 14,948 2009\* 53,185 66,323 13,138 80.2% 87.9% 68.7% 2008 52,548 62,554 10,006 84.0% 14,559 2007 47.815 58.116 10,301 82.3% 13.834 74.5% 2006 42,669 52,822 10,153 80.8% 13,002 78.1% 2005\* 40,372 49,628 9,256 81.3% 12,212 75.8% 2004 39,691 43,958 4,267 90.3% 11,510 37.1% 2003 39,243 40,698 1,455 96.4% 10,885 13.4% 2002 38,957 101.8% 10,669 (6.5%)38,265 (692)State Police Officers' Retirement System (SPORS) \$ \$ \$ \$ 100 2011 617 986 369 370.3% 62.6% 2010 634 949 315 66.8% 98 323.2% 2009\* 647 879 232 73.6% 101 230.0% 2008 646 844 198 76.6% 103 193.2% 2007 595 806 211 73.8% 101 209.4% 2006 539 730 191 73.8% 94 204.1% 91 2005\* 514 673 159 76.4% 174.8% 146 77.8% 178.0% 2004 510 656 82 79 2003 509 616 107 82.6% 135.4% 2002 508 595 87 85.4% 81 107.4% Virginia Law Officers' Retirement System (VaLORS) \$ \$ 757 356 2011 926 1,683 55.0% 212.5% 2010 925 1,579 654 58.6% 346 189.0% 499 64.7% 359 138.9% 2009\* 913 1,412 2008 873 1,281 408 68.2% 368 110.8% 2007 766 400 65.7% 341 117.2% 1,166 1,096 440 321 2006 656 59.9% 137.0% 2005\* 575 980 405 58.7% 307 132.0% 2004 509 927 418 298 140.3% 54.9% 854 292 2003 458 396 53.6% 135.6% 2002 418 806 388 306 126.8% 51.9% Judicial Retirement System (JRS) \$ \$ \$ \$ 2011 371 569 198 65.2% 59 336.8% 2010 372 560 188 66.5% 61 307.8% 2009\* 378 521 143 72.5% 63 228.4% 2008 374 495 121 75.6% 61 199.9% 76.9% 58 2007 340 442 102 177.3% 2006 302 424 122 71.3% 54 224.1% 2005\* 288 402 71.5% 52 220.7% 114 168.8% 2004 285 366 81 78.0% 48 2003 282 348 66 81.1% 48 137.5% 2002 281 352 71 79.8% 48 147.9%

<sup>\*</sup>Revised economic and demographic assumptions due to experience study.

<sup>\*\*</sup>The breakdown of VRS data into state, teacher and political subdivisions is presented in the Statistical Section.

### REQUIRED SUPPLEMENTAL SCHEDULE OF EMPLOYER CONTRIBUTIONS - PENSION PLANS

(DOLLARS IN THOUSANDS) Annual Statutory Year Ended Required Required Percentage Percentage Contributed\* Contribution June 30 Contribution Contributed Virginia Retirement System (VRS) 2012 \$ 1,614,464 59.56% \$ 961,653 100.00% 2011 1.577.131 46.73% 736.950 100.00% 2010 1,489,124 66.57% 991,334 100.00% 2009 1,501,018 81.25% 1,219,645 100.00% 2008 1,378,993 92.58% 1,276,645 100.00% 2007 85.89% 1,299,606 1,116,217 100.00% 2006 864,245 89.51% 773,553 100.00% 2005 810,944 85.26% 691,415 100.00% 2004 469,200 91.66% 430,064 100.00% 2003 450,766 67.61% 304,784 100.00% State Police Officers' Retirement System (SPORS) 2012 \$ 26,250 43.58% 11,441 100.00% 2011 24,570 30.36% 7,460 100.00% 2010 23.791 15,714 66.05% 100.00% 24,241 2009 83.23% 20.175 100.00% 22,941 100.00% 2008 91.49% 20,989 84.31% 100.00% 2007 19,402 16,358 2006 23,132 65.96% 15,258 100.00% 2005 21,946 65.96% 14,475 100.00% 2004 10,328 20,187 51.16% 100.00% 2003 19,866 44.20% 8,781 100.00% Virginia Law Officers' Retirement System (VaLORS) \$ 44.27% 2012 55.306 24.481 100.00% 2011 53,686 32.14% 17,255 100.00% 2010 57,894 67.41% 39,027 100.00% 2009 60.059 84.80% 50.932 100.00% 2008 61,325 91.20% 100.00% 55,929 2007 56,190 86.03% 48,338 100.00% 2006 77,414 67.96% 52,611 100.00% 2005 74,301 67.96% 50,495 100.00% 2004 72,752 40,596 55.80% 100.00% 2003 72,699 48.00% 34,895 100.00% Judicial Retirement System (JRS) \$ 2012 \$ 27,631 68.43% 18,907 100.00% 2011 28.101 17,303 61.57% 100.00% 2010 23,638 72.20% 17,065 100.00% 23,148 21,000 100.00% 2009 90.72% 2008 23,599 94.86% 22,386 100.00% 2007 22,557 91.02% 20,530 100.00% 2006 23,871 67.89% 16,206 100.00% 2005 22,490 67.89% 15,269 100.00% 2004 21,341 71.18% 15,190 100.00% 2003 21,110 64.44% 13,604 100.00%

<sup>\*</sup>Contributions made by employers during the fiscal years ended June 30, 2003 through June 30, 2012 were not in all cases in accordance with the actuarially determined Annual Required Contribution (ARC), but they did meet statutory requirements.

# REQUIRED SUPPLEMENTAL SCHEDULE OF FUNDING PROGRESS – OTHER POST-EMPLOYMENT BENEFIT PLANS

(DOLLARS IN MILLIONS) UAAL as a Actuarial Percentage of Covered Actuarial Actuarial Accrued Unfunded Valuation Date Value of Liability AAL (UAAL) Funded Covered Payroll June 30 Assets(a) (AAL)(b) (b-a) Ratio (a/b) Payroll (c) (b-a)/(c)**Group Life Insurance Fund** 2011 \$ 852 \$ 2,359 \$ 1,507 36.1% \$ 16,543 9.1% 2010 929 2,245 1,316 41.4% 16,526 8.0% 2009 967 1,995 1,028 48.5% 16,728 6.1% 797 2008 975 1,772 55.0% 16,267 4.9% 2007 880 1,552 672 56.7% 14,822 4.5% 2006\* 751 1,436 685 52.3% 13,923 4.9% Retiree Health Insurance Credit Fund 2011 \$ 213 \$ 2,195 \$ 1,982 9.7% \$ 14,111 14.0% 2010\*\* 281 2,162 1,881 13.0% 14,220 13.2% 2009\*\* 296 2.007 14,339 11.9% 1,711 14.8% 2008\*\* 264 1,943 1,679 13.6% 13,686 12.3% 2007\*\* 207 1,883 1,676 11,935 14.0% 11.0% Disability Insurance Trust Fund \*\*\* \$ 369 \$ 296 \$ (73) \$ 3,372 (2.2%)2011 124.6% 2010\*\*\* 311 (25)336 108.0% 3.168 (0.8%)2009\*\*\* 290 291 99.7% 1 4,080 0.0% 2008\*\*\* 79 313 392 79.9% 4,111 1.9% 2007 264 451 187 58.5% 3,909 4.8% 2006\* 192 423 231 45.4% 6.2% 3,716 Line of Duty Act Trust Fund \$ \$ 399 399 0.0% 2011 N/A N/A 2010\*\*\*\* 576 0.0% N/A 576 N/A

<sup>\*</sup>The June 30, 2006 was the first actuarial valuation prepared using the required parameters of GASB 43.

<sup>\*\*</sup>Data for 2007-2010 has been restated to include the state-funded Retiree Health Insurance Credit benefit for local employees. Similar information for 2006 was not available so that year has been excluded.

<sup>\*\*\*</sup>Data for 2008-2010 has been restated to include the long-term care program. Prior years were funded by premiums paid to an insurance carrier. Benefits were paid by the carrier and the program liabilities belonged to the carrier.

<sup>\*\*\*\*</sup>Contributions to the Line of Duty Act Trust Fund are based on the number of participants in the program using a per capita-based contribution versus a payroll-based contribution. Fiscal year 2010 was the first actuarial valuation prepared for the Line of Duty Act Trust Fund.

# REQUIRED SUPPLEMENTAL SCHEDULE OF EMPLOYER CONTRIBUTIONS - OTHER POST-EMPLOYMENT **BENEFIT PLANS**

(DOLLARS IN THOUSANDS)

Year Ended June 30	Annual Required Contribution	Percentage Contributed*	Statutory Required Contribution		Percentage Contributed
		Group Life Insurance F	und		
2012	\$ 181,527	26.05%	\$	47,293	100.00%
2011	177,378	25.23%		44,744	100.00%
2010	145,228	65.54%		95,185	100.00%
2009	146,545	92.13%		135,019	100.00%
2008	158,740	100.00%		158,740	100.00%
		Retiree Health Insurance Cre	edit Fund		
2012	\$ 138,195	37.54%	\$	51,882	100.00%
2011	133,655	36.46%		48,736	100.00%
2010	148,956	66.70%		99,356	100.00%
2009	150,048	96.63%		144,989	100.00%
2008	147,524	100.00%		147,524	100.00%
		Disability Insurance Trust	t Fund		
2012	\$ 30,285	3.62%	\$	1,096	100.00%
2011	28,646	0.00%		-	100.00%
2010	76,530	40.32%		30,861	100.00%
2009	78,120	91.33%		71,344	100.00%
2008	97,975	80.00%		78,380	100.00%
		Line of Duty Act Trust Fu	ınd**		
2012	\$ 25,033	33.25%	\$	8,323	100.00%
2011	N/A	N/A		N/A	N/A

<sup>\*</sup>Contributions made by employers during the fiscal years ended June 30, 2008 through June 30, 2012 were not in all cases in accordance with the actuarially determined Annual Required Contribution (ARC), but they did meet statutory requirements.

<sup>\*\*</sup> Fiscal year 2011 was the first year for the Line of Duty Act Trust Fund. It was funded by a loan from the Group Life Insurance Trust Fund. As a result, there were no contributions required or paid during the fiscal year. Contributions of \$10,678,000 were recorded for fiscal year 2011; however, VRS did not receive contributions under the program until FY 2012.

### SCHEDULE OF ADMINISTRATIVE EXPENSES

FOR THE YEARS ENDED JUNE 30 (EXPRESSED IN THOUSANDS) 2012 2011 Personal Services: \$ 25.922 23.641 Salaries and Wages \$ Per Diem Services 321 291 **Retirement Contributions** 1.340 1.511 Social Security 1.602 1.491 Group Life and Medical Insurance 2.856 2.726 Compensated Absences 264 211 **Total Personal Services** 32,476 29,700 **Professional Services:** Data Processing 8,313 11,506 Actuarial and Consulting Services 2,262 2,122 Legal Services 785 653 Medical Review Services 808 764 Management Services 399 376 Personnel Development Services 44 290 **Total Professional Services** 12,611 15,711 **Communication Services:** Media Services 16 21 Printing 648 758 Postage and Delivery Services 416 573 Telecommunications 694 644 **Total Communication Services** 1,774 1,996 Rentals: **Business Equipment** 108 311 Office Space 2,291 2,135 **Total Rentals** 2,399 2,446 Other Services and Charges: Skilled and Clerical Services 293 140 Depreciation 639 652 Dues and Membership 105 93 **Building Expense** 0 (4)Equipment 1,257 3,177 Insurance 42 41 Repairs and Maintenance 13 11 Supplies and Materials 103 104 Travel and Transportation 527 394 Miscellaneous 180 120 3,157 4,730 **Total Other Services and Charges** 54,583 **Total Administrative Expenses** 52.417 Adjustment for Capitalization of Expenses (5,974)(9,527)**Total Administrative Expenses (GAAP Basis)** 46,443 45,056 Adjustments Necessary to Convert Administrative Expenses on the GAAP Basis to the Budgetary Basis at Year End (Net) 9.597 6.021 Administrative Expenses (Budgetary Basis) 52,464 54,653 **Administrative Expenses Appropriated** 76,337 79,313 **Distribution of Administrative Expenses:** Total Administrative Expenses \$46,443 \$45.056 Less In-House Investment Management (17,310)

(19,015)

27,428

27,746

**Net Administrative Expenses** 

# SCHEDULE OF PROFESSIONAL AND CONSULTING SERVICES

FOR THE YEAR ENDED JUNE 30, 2012

(EXPRESSED IN THOUSANDS)

Total Professional and Consulting Services				\$ 6,230.1
Total Consulting Services				\$ 4,526.4
TUST ASSUCIATES	Court neporter for Disability Healings		10.5	
Wells Fargo Bank, NA Yost Associates	Recordkeeping Services Court Reporter for Disability Hearings		33.0	
Vu Le	Investment Consulting Services		53.2	
United Review Services, Inc.	Medical Board Review and Examinations		803.3	
Townsend Group	Investment Consulting Services		170.0	
Titan Group	Administrative Pay Plan Analysis		8.5	
Strategic Economic Decisions, Inc.	Economic Advisory Services		10.0	
Small World Solution, LLC	Location Services		11.3	
Servient, Inc.	Investment Consulting Services		378.9	
Sagitec Solutions, LLC	VRS "Modernization Project" Solution Vendor		581.2	
Pure Culture Consulting, Inc.	Management Consulting Services		7.5	
Property & Portfolio Research, Inc.	Investment Consulting Services		150.0	
Netragard, Inc.	Advanced Systems Penetrational Testing		52.9	
Milliman, Inc	Long-Term Care Plan Consulting		60.0	
McLagan Partners, Inc.	Investment Compensation Study		5.5	
McGinley, Elsberg & Hutcheson, PLC	Fact Finding Hearing Officer for Disability Cases		40.9	
Kroll	Investment Advisory Services		58.9	
Korn Ferry International	CIO Search Consulting		4.5	
Katzen & Frye, PC	Fact Finding Hearing Officer for Disability Cases		158.7	
Hewitt Associates	Retirement Benefits Planning Tool		17.2	
Harrison & Turk, PC	Fact Finding Hearing Officer for Disability Cases		106.8	
Genex	Job Analysis of Disability Cases		1.1	
FX Transparency, LLC	Investment Advisory Services		25.0	
Cook & Wiley, Inc.	Fact Finding Hearing Officer for Disability Cases		13.0	
CEM Benchmarking, Inc.	Benchmarking Analysis		35.0	
CACI Federal, Inc.	Test Planning & Execution, I, V & V Review Report		162.9	
Bertini, O'Donnell & Hammer, PC	Fact Finding Hearing Officer for Disability Cases		31.4	
Assura, Inc.	VRS Navigator (VNAV) Risk Assessment		1.0	
Albourne America, LLC	Investment Consulting Services		260.0	
Advent Software, Inc.	Software Maintenance		158.2	
Advantage 2000	Social Security Advocacy & Disability Tracking	\$	116.0	
Consulting Services:				
Oversight Services				\$ 1,703.7
Total Actuarial, Legal and				
Labaton Sucharow, LLP	Legal Services		102.7	
Troutman Sanders, LLP	Legal Services		143.0	
Cavanaugh Macdonald Consulting, LLC	Actuarial Services & Benefits Consulting	1,	199.3	
Review Commission	Oversight Responsibilities	\$	258.7	
5 . 6				

### SCHEDULE OF INVESTMENT EXPENSES

FOR THE YEARS ENDED JUNE 30

(EXPRESSED IN THOUSANDS)

	2012	2011
Management Fees:		
Domestic Managers	\$ 10,427	\$ 11,740
Non-U.S. Equity Managers	26,224	30,260
Global Equity Managers	18,306	15,594
Fixed Income Managers	19,325	17,081
Credit Strategies Managers	37,322	40,029
Real Estate Managers	35,829	29,299
Alternative Investment Managers	62,169	68,743
Hedge Fund Managers	58,447	58,446
Total Management Fees	268,049	271,192
Performance Fees	15,125	26,269
Miscellaneous Fees and Expenses:		
Custodial Fees	4,501	4,425
Legal Fees	529	385
Other Fees and Expenses	487	449
Total Miscellaneous Fees and Expenses	5,517	5,259
In-House Investment Management	19,015	17,310
Total Investment Expenses	\$ 307,706	\$ 320,030



# 3 investment section

Chief Investment Officer's Letter
Investment Account
Portfolio Highlights
VRS Money Managers
Public Equity Commissions
Schedule of Investment Management Fees
and Expenses
Investment Summary



Virginia Retirement System

Comprehensive Annual Financial Report 2012



# Chief Investment Officer's Letter



Ronald D. Schmitz, Chief Investment Officer

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Toll Free: 1-888-VARETIR (827-3847) • TDD: 804-344-3190

December 4, 2012

### To the Members of the Board of Trustees and Participants of the Virginia Retirement System:

I am pleased to be writing my first CIO letter in my new home state. I look forward to many interesting and productive years ahead – both professionally and personally.

While the fund performed well relative to its intermediate benchmark, it was a difficult environment for investors, which led to a meager return of 1.4% for the year. Slowing economic growth domestically and overseas, combined with fiscal/monetary policy uncertainty, weighed heavily on markets for fiscal year 2012. Despite the low return environment of the past 12 months, the annualized return over the past three years has been 11.3%. This represents a healthy return from the market depths experienced in 2008 and early 2009.

Private market assets were the star performers for fiscal year 2012 as both real assets and private equity generated double digit returns for the year ended June 30. The real assets portfolio won the 12-month derby with a return of 11.9%. Privately held assets (individual buildings) outperformed the relevant index while the public investments (REITs) underperformed the index. The combined portfolio return of 11.9% was 20 basis points ahead of the blended benchmark for the year. Longer term, real assets have been strong as well, generating an annualized 9.2% return for the 10 years ended June 30, 2012. Over time, the portfolio has more than met its mission - providing returns competitive with other asset classes while delivering diversification benefits to the total fund. Of course, real assets also provide the total fund with a measure of inflation protection.

Private equity delivered a 10.9% return for the fiscal year, well ahead of the benchmark return of 9.7%. This performance is notable given the fact that our general partners have been conservative in reflecting market prices of the underlying portfolio companies. The favorable performance reflects the fact that the underlying portfolio companies are generating above average revenue and profit growth. Longer term, private equity has been the highest performing asset class in the VRS portfolio, delivering a robust 12.5% return over the 10 years ended in June. Over this time period, private equity has delivered double digit returns in up markets and has performed well in negative stock market environments.

The fixed income portfolio had a strong year on an absolute basis, generating a 7.9% return for fiscal year 2012. This performance was ahead of the benchmark by 12 basis points for the year ended in June. Over the preceding three years, performance was a remarkable 9.3%, which was 2.5% ahead of the benchmark. This result stems from holding high quality assets in the portfolio in an environment where spreads narrowed considerably as investors sought safety. Given good long-term performance, the fixed income portfolio will continue its recent trend of increasing the assets managed internally, thereby saving management fees that otherwise would be paid to outside managers.

The credit strategies portfolio generated a return of 1.4% for the 12 months ended June 30, below its benchmark return of 3.8%. We manage the credit portfolio to provide attractive risk adjusted returns over a longer term period and do not expect it to always outperform the benchmark returns on an annual basis. In absolute terms,

the annualized three-year program return of 12.4% surpassed returns experienced in the equity markets, while exhibiting less than half the volatility (a measure of risk) and less than 90% of the volatility of the program benchmark. All factors considered, the program continues to serve its purpose by contributing strong returns, generating enhanced income and providing a measure of portfolio protection across a variety of scenarios.

It was a tough year in the public equity markets. Public equity was the weakest performing asset class in fiscal 2012 with a return of -4.6%. This return outperformed our global benchmark return by 68 basis points, capturing only 87% of the market's decline. Having shifted a significant portion of the equity portfolio into more protected strategies in recent years, we are satisfied with this result of conserving capital versus our benchmark. We have increasingly found value in strategies that favor higher quality companies, lower volatility portfolio structures and partially hedged equity mandates. This positioning has resulted in lower volatility than the broad market and a better risk adjusted return; yet we still expect to capture the full market return over a complete cycle. Indeed, the 10-year return of the VRS public equity portfolio did match the benchmark index. This covers a strong bull market as well as a painful bear market, thus proving the low volatility thesis.

In addition, last year we continued to outperform in various equity strategies managed by our Internal Equity Management team (IEM). Market risk oriented accounts generated a return of 63 basis points above the composite benchmark. All accounts, including the low volatility mandate, showed a remarkable 4.8% return. This year rounds out a compelling 11-year track record for the internal team. IEM has delivered positive excess returns in nine of 11 years, including the last six years which encompassed the most volatile investment environment since the 1930s. The team continues to seek new portfolio strategies that allow us to bring assets in-house, thereby saving fees that would otherwise be paid to external managers.

As mentioned earlier, the total fund performance was 1.4%, ahead of the benchmark return by 0.2%. This may seem to some like a modest return on both an absolute and relative basis. But this level of outperformance versus the benchmark index generated extra dollars in the VRS coffers. On top of this, operating efficiencies as measured by an independent survey shows that VRS implements its strategies efficiently. The combination of value-added investment performance and efficient operations represents money that Virginia taxpayers do not have to contribute for state employee pensions.

Looking ahead, the market environment reflects policy uncertainty both domestically and abroad. Expectations of the impact of the looming fiscal cliff, regulatory changes, polarized fiscal policy, and lack of confidence in the ability of the Fed to effectively pursue a dual mandate through successive quantitative easing will continue to contribute to elevated volatility in markets. Navigating this turbulence is made more challenging as global market volatility reflects on-again-off-again policy responses to the sovereign debt and banking crisis in the European Union. The combined impact has managed expectations downward, muting the pace of the global recovery.

Within this set of broader challenges, there are positive developments that signal continuing improvement in economic growth. Household deleveraging has decelerated as evidenced by improved trends in retail sales and renewed housing demand. Consumer sentiment is at its highest level since the beginning of the recession, and both printed and expected inflation remain low. Still, structural weaknesses in the labor market persist because firms are reluctant to expand production in a setting characterized by so much uncertainty. Recent market gains are arguably as much the outcome of liquidity injections and flight to quality as they are to improving fundamentals. Therefore, both the growth and earnings outlook are tempered on continued sporadic volatility spikes, the rate of improvement in macroeconomic fundamentals, and prospects for sharper policy focus both domestically and abroad.

To conclude, I would like to extend my thanks to the Board of Trustees for placing their faith in me, as well as to the Investment Advisory Committee, a highly skilled group of external investment experts, for their time and efforts in making the VRS portfolio better. I also would like to thank VRS Director Bob Schultze and the entire investment staff at VRS.

Sincerely,

Ronald D. Schmitz

Chief Investment Officer

he Investment Section provides detailed information regarding the performance of the commingled investment pool. This information includes asset allocations, portfolio highlights, a list of VRS' money managers and public equity commissions for the fiscal year. The section also presents the System's investment management fees and expenses and an investment summary. \_\_

# Investment Account

The VRS Board of Trustees has fiduciary responsibility to invest the fund solely in the interest of the beneficiaries of the System. As established by the Code of Virginia, "the Board shall invest the assets of the Retirement System with the care, skill, prudence, and due diligence that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims."

Benefit payments are projected to occur over a long period of time. This allows VRS to adopt a long-term investment horizon and asset allocation policy for the management of fund assets. Asset allocation policy is critical because it defines the basic risk and return characteristics of the VRS investment portfolio. Asset allocation targets are established using an asset-liability analysis designed to assist the Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the VRS balance sheet in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact on funded status and contribution rates.

The Chief Investment Officer has been delegated authority by the Board to allocate the System's investments within the approved asset allocation policy and within the Board-approved active risk budget. The total fund active risk budget describes the degree of tolerance for yearly variation in the fund's performance relative to the Intermediate Term Benchmark. The primary risk measure used for this purpose is Total Fund Tracking Error, calculated as the standard deviation of the difference between the fund's return and the return of the Intermediate Term Benchmark. From this measure, probability estimates can be derived to help the Board estimate the risk of underperforming the benchmark by certain margins.

The investment staff manages the VRS portfolio on a day-to-day basis according to policies and guidelines established by the Board. The staff manages assets on a direct basis and through outside investment managers. Managers employ both active and passive investment strategies. The Board has established various performance benchmarks to serve as tools for measuring progress toward the achievement of intermediate and longer-term investment goals.

The asset allocation mix of the VRS fund as of June 30, 2012 is shown in Figure 3.1:



FIGURE 3.1 – ASSET ALLOCATION MIX

AS OF JUNE 30, 2012

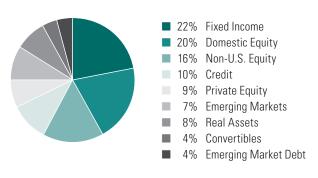


FIGURE 3.2 - INVESTMENT PERFORMANCE SUMMARY

ANNUALIZED DATA FOR THE PERIOD ENDING JUNE 30, 2012

	1 Year	3 Years	5 Years
1. Total Fund			
VRS	1.4%	11.3%	0.8%
Total Fund Intermediate Benchmark	1.2%	11.7 %	1.1%
2. Total Public Equity			
VRS	-4.6%	11.7%	-2.1%
Custom Benchmark	-5.2%	11.4%	-1.9%
3. Total Fixed Income*			
VRS	7.9%	9.3%	7.7%
Custom Benchmark	7.7%	6.8 %	7.1%
4. Total Credit Strategies			
VRS	1.4%	12.4%	4.5%
Custom Benchmark	3.8%	13.8%	4.8%
5. Total Real Assets			
VRS	11.9%	11.8%	0.9%
Custom Benchmark	11.7%	9.4%	2.3%
6. Total Private Equity			
VRS	10.9%	15.2%	6.7%
Custom Benchmark	9.7%	26.8%	4.8%

Investment return calculations were prepared using a time-weighted return methodology.

<sup>\*</sup>Includes emerging market debt allocations initiated in April 2011.

# Portfolio Highlights

### PUBLIC EQUITY

The market value of the Total Public Equity Program as of June 30, 2012 was \$22.8 billion, representing approximately 43% of the total fund. Forty-seven percent was invested in Domestic Equity and 53% in International Equity. Nine percent was invested in passive strategies, and 33% was managed internally. The objective of the portfolio is to exceed the risk-adjusted return of the Custom Benchmark over longer-term periods, net of all costs. At fiscal year end, the Custom Benchmark was comprised of 48.1% of the MSCI U.S. Investible Market Index (IMI), 39.6% of the MSCI World excluding U.S. IMI (50% hedged) and 12.3% in the MSCI Emerging IMI.

The Total Public Equity Program outperformed the Custom Benchmark during the fiscal year by 0.7%. During the year, the U.S. benchmark was up 4.0%, the Non-U.S. Developed (50% hedged) benchmark was down 11.2% and the Emerging Markets benchmark was down 16.3%. Public markets were mixed around the world as the economic recovery stalled.

The Total Public Equity Program is dominated by traditional, long-only strategies (84.6% of program, or \$19.3 billion). The program also employs traditional long-short strategies (1.8% of program, or \$0.4 billion) and equity-oriented hedge fund strategies (13.6% of program, or \$3.1 billion).

FIGURE 3.3 – TOTAL PUBLIC EQUITY PROGRAM BENCHMARKS

Benchmark Category	VRS Return	Benchmark Return	VRS Weight	Benchmark Weight
U.S. Active Standard	8.33%	5.12%	21.31%	20.43%
U.S. Active Small Cap	3.20%	-2.09%	4.17%	6.31%
U.S. Passive	5.44%	5.27%	0.66%	0.66%
Non-U.S. Developed Small Cap	-10.22%	-13.03%	4.45%	4.58%
Non-U.S. Developed Standard	-10.52%	-10.94%	5.94%	9.42%
Non-U.S. Passive	-10.80%	-10.94%	8.30%	8.30%
Emerging	-17.07%	-16.32%	13.71%	8.84%
Global	-5.73%	-4.78%	27.86%	27.86%
Hedge Funds	-2.51%	-2.00%	13.60%	13.60%
Total Program	-4.56%	-5.25%	100.00%	100.00%

One-year weights and returns ending June 30, 2012.

There were some differences among the Total Public Equity portfolio versus the Custom Benchmark based on sectors and region weights:

FIGURE 3.4 - CUSTOM BENCHMARK SECTORS AND REGIONS

Sectors	VRS	Strategic Benchmark	Regions	VRS	Strategic Benchmark
Consumer Discretionary	11.99%	11.14%	North America	52.31%	52.44%
Consumer Staples	11.29%	9.99%	Europe/Middle East/Africa	24.41%	24.53%
Energy	8.66%	10.20%	Asia Pacific	19.41%	20.52%
Financials	16.75%	19.56%	Latin and South America	3.87%	2.51%
Health Care	11.10%	9.39%			
Industrials	10.80%	11.25%		100.00%	100.00%
Information Technology	14.27%	12.80%			
Materials	5.79%	7.71%			
Telecommunication Services	5.60%	4.22%			
Utilities	3.75%	3.74%			
	100.00%	100.00%			

Based on Barra's classification of sectors and regions and excludes cash.

The top 10 holdings in the Total Public Equity Program comprised 7.3% of the program at fiscal year end. In comparison to last year, four companies fell from last year's list. Petrobras, Gazprom, JP Morgan and Pfizer were replaced by Wells Fargo, Samsung, China Mobile and Philip Morris.

FIGURE 3.5 - PUBLIC EQUITY: TOP 10 EXPOSURES

AS OF JUNE 30, 2012

Company	Market Value	Shares	
Apple Inc.	\$ 328,046,358	561,723	
Exxon Mobil Corporation	224,450,071	2,623,000	
Microsoft Corporation	179,404,885	5,864,821	
Wells Fargo	148,909,412	4,453,033	
Google, Inc.	144,440,886	249,006	
Chevron	136,351,003	1,292,427	
Samsung Electronics	134,680,944	128,440	
China Mobile	121,188,321	11,091,913	
Johnson & Johnson	119,965,868	1,775,694	
Philip Morris Intl.	117,735,535	1,349,250	

Aggregated various share classes based on parent company. VRS maintains a complete list of portfolio holdings.

### FIXED INCOME

VRS invests a portion of its portfolio in fixed income investments in order to reduce total fund volatility, produce income and provide for some protection in the event of a deflationary environment. At year end, approximately \$12.5 billion was invested in fixed income assets, representing 26% of the VRS portfolio. Of this amount, approximately 84% was invested in investment grade fixed income strategies, and approximately 16% was invested in emerging market fixed income assets.

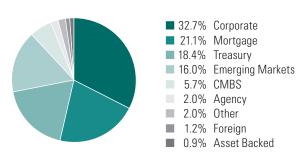
The objective of the investment grade portion of the program is to maximize the return (net of all costs) relative to the Citigroup Broad Investment Grade Index, while staying in compliance with risk limits. The objective of the emerging market portion of the program is to maximize the return (net of all costs) relative to the emerging market fixed income benchmark, while staying in compliance with risk limits. The total fixed income program return was 7.9%, and the benchmark return was 7.7% for the fiscal year. Of that, the domestic fixed income return was 7.8% with the benchmark at 7.5%, whereas the emerging market debt program return was 5.1% with a benchmark return of 6.9%.

In the United States, yields fell dramatically over the last twelve months as weakening growth, ballooning deficits, European financial crises, and the threat of the looming fiscal cliff all combined to cause investors to seek the safety of U.S. treasuries. Despite the aggressive monetary actions taken by the Federal Open Market Committee (FOMC) over the last four years, the U.S. economy remains in a weakened and uncertain state. We expect the rest of 2012 and at least the first half of 2013 to be equally unsettled

as policy decisions are made following the U.S. elections. During the fiscal year, two-year interest rates decreased by 16 basis points to 0.30%, and 10-year interest rates decreased by 152 basis points to 1.65%. Spread sectors performed with mixed results. Investment grade credit and agency MBS performed very well, tightening by 46 and 39 basis points, respectively. Agency debentures and swaps were unchanged, and ABS and CMBS widened by 22 and 8 basis points, respectively.

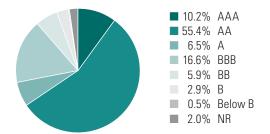
## FIGURE 3.6 - FIXED INCOME PORTFOLIO BY SECTOR ALLOCATION

AS OF JUNE 30, 2012



### FIGURE 3.7 – FIXED INCOME PORTFOLIO BY CREDIT QUALITY BREAKDOWN

AS OF JUNE 30, 2012



# FIGURE 3.8 - FIXED INCOME: TOP 10 HOLDINGS BY MARKET VALUE

AS OF JUNE 30, 2012

Par	Security Description	Market Value	
\$ 260,000,000	US Treasury Notes 0.250% due 10/31/13	259,885,600	
180,000,000	US Treasury Notes 1.250% due 04/15/14	182,930,400	
165,000,000	US Treasury Notes 2.000% due 01/31/16	173,603,100	
156,000,000	US Treasury Notes 2.625% due 12/31/14	164,728,200	
140,000,000	US Treasury Notes 2.375% due 03/31/16	149,472,400	
135,000,000	US Treasury Notes 0.875% due 02/28/17	136,170,450	
130,000,000	US Treasury Notes 2.375% due 09/30/14	135,930,600	
125,000,000	US Treasury Notes 2.125% due 12/31/15	131,938,750	
115,000,000	US Treasury Notes 3.125% due 05/15/19	130,726,250	
100,000,000	US Treasury Bonds 3.875% due 08/15/40	123,018,000	

### SHORT-TERM INVESTMENTS

Generally, VRS desires to remain fully invested at all times and seeks to minimize its holdings of cash investments. Temporary cash balances are invested in short-term money market instruments with the goal of maintaining high credit quality and liquidity.

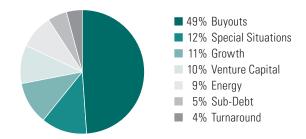
### PRIVATE EQUITY

VRS invests in private equity in order to achieve returns greater than those available in the public equity markets. Specifically, the program seeks to outperform the Russell 3000 Index by 2.5% per year. Program returns are calculated on both a timeweighted basis and a dollar-weighted or internal rate-of-return (IRR) basis. On a time-weighted basis, the program return for FY 2012 was 10.9%. On a dollar-weighted or IRR basis, the private equity one-year return was 10.5% as of March 31, 2012.

As of June 30, 2012, the carrying value of the program was approximately \$4.8 billion. Most of the program is invested in limited partnerships. Sectors in which the program invests include leveraged buyouts, venture capital, growth, subdebt, turnaround, energy and special situations. The Private Equity Program's market value by sub-class was as follows:

FIGURE 3.9 - PRIVATE EQUITY PROGRAM

AS OF JUNE 30, 2012



### **REAL ASSETS**

A portion of the portfolio is invested in real assets to help diversify the total fund by providing exposure to asset classes and sectors that offer low historical correlations with the public markets with the

additional objectives of generating competitive riskadjusted returns, significant operating cash flows and inflation linkages. The portfolio continued to grow in fiscal year 2012, producing an 11.9% return and outperforming the benchmark by 20 basis points. Our REITs produced a total return of 1.7% while the private portion of the portfolio delivered a 14.0% return for the fiscal year. In recent years, the program has expanded to include other real assets, such as infrastructure and timberland, in addition to real estate.

The percentage of the total fund represented by the real assets portfolio increased over the course of the year from 6.8% to 8.2% due primarily to new fundings as well as asset income and appreciation. At fiscal year end, the portfolio was composed of approximately 14.6% REITs, 84.3% private real estate and 1.1% timberland. Portfolio leverage as a percentage of total real assets was 39.1% as of March 31, 2012.

FIGURE 3.10 - REAL ESTATE BY PROPERTY TYPE

AS OF MARCH 31, 2012

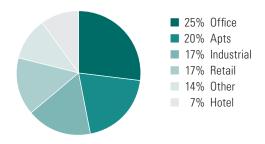
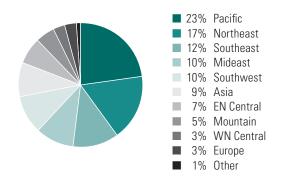
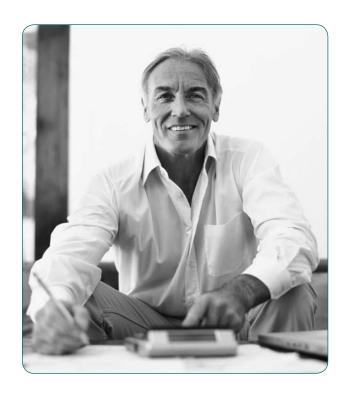


FIGURE 3.11 - REAL ESTATE BY GEOGRAPHIC REGION

AS OF MARCH 31, 2012



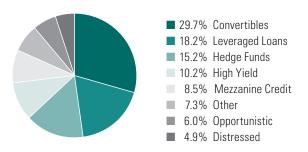


### **CREDIT STRATEGIES**

VRS allocates a portion of the portfolio to credit-related investments. The Credit Strategies Program is utilized opportunistically to provide an alternative arena for generating attractive risk adjusted returns. The objectives of the program are to provide returns that are competitive with the forward looking expectations of the areas from where funding has been drawn, to provide higher levels of income, and to provide diversification benefits to the plan. For the fiscal year, the program returned 1.4%, while the program's custom benchmark returned 3.8%.

FIGURE 3.12 - CREDIT STRATEGIES

AS OF JUNE 30, 2012



### MORE INFORMATION

A complete list of the investment portfolio is available upon request. Address requests to the Investment Compliance Officer, Virginia Retirement System, P.O. Box 2500, Richmond, VA 23218-2500.

# VRS Money Managers

The diversified investment structure as of June 30, 2012 is reflected in the following tables, which list VRS managers by investment program and style.

### PUBLIC EQUITY MONEY MANAGERS

External Managers – Top 10 Managers	Style Description
T. Rowe Price Acadian Asset Management Nordea Arrowstreet Capital GMO BlackRock Epoch	Global, Emerging Markets Non-U.S. Small, Emerging Markets Global Global Emerging Markets Global Global Global
AllianceBernstein The Boston Company LSV Asset Management	Global Emerging Markets Non-U.S. Small
Internal Portfolios	Style Description
Potomac Dogwood Mobjack Matoaka Afton Madison	U.S. Large Non-U.S. Large U.S. Large Non-U.S. Large U.S. Small U.S. Large
Hedge Funds — Top 10 Managers	Style Description
ValueAct Capital Maverick Capital Lansdowne Partners Blue Ridge, LP New Mountain Capital Theleme Cevian TPG-Axon Partners Clough Clovis Capital	Long/Short
FIXED INCOME  Futurnal Managara Tan 10 Managara	Ctula Description
External Managers — Top 10 Managers  State Street Global Advisors  PIMCO (Credit Absolute Return/EMD)  Western Asset Management (Core/EMD)  Payden & Rygel  BlackRock  Bridgewater	Style Description  IG Credit/External Passive Opportunistic/External Active Opportunistic/External Active EMD/External Active Core/External Active Opportunistic/External Active

### FIXED INCOME continued

Credit Suisse

FIXED INCOME, CONTINUED		
External Managers	Style Description	
Prudential	Opportunistic	
Wellington	Core/External Active	
Torchlight	Opportunistic	
Smith Breeden	Core/External Active	
Internal Portfolio	Style Description	
VRS Core	Core/Internal Active	
PRIVATE EQUITY - TOP 10 MANAGERS	Style Description	

**Customized Separate Account** 

Hellman and Friedman	Buyout
Summit Partners	Growth & Sub-Debt
TPG	Buyout
	_

First Reserve Energy Welsh, Carson, Anderson and Stowe Buyout & Sub-Debt

**Apax Partners** Buyout

TA Associates Growth & Sub-Debt

Charterhouse **Buyout** Madison Dearborn **Buyout** 

### CREDIT STRATEGY - TOP 10 MANAGERS Style Description

Convertibles Advent Capital Management Anchorage Capital Group Hedge Fund

Beach Point Capital Management Leveraged Loans, Opportunistic, Distressed

King Street Capital Management Hedge Fund

Oaktree Capital Management Mezzanine, Convertibles, High Yield, Distressed

Prudential High Yield and Mezzanine Solus Alternative Asset Management Hedge Fund and Opportunistic Western Asset Management Leveraged Loans

York Capital Management Hedge Fund Zazove Associates Convertibles

### REAL ESTATE - TOP 10 MANAGERS Style Description

Prudential Real Estate Investors Core & Enhanced Core Core, Enhanced Core, Opportunistic & Global REITs Morgan Stanley Opportunistic Blackstone Real Estate Partners JP Morgan Investment Management, Inc. Core

**Clarion Partners Enhanced Core** 

Enhanced Core & Opportunistic **ProLogis** 

Urdang Securities Management, Inc. **Global REITs** TA Associates Realty Core

LaSalle Investment Management Core Angelo Gordon & Co. Core

# Public Equity Commissions AS OF JUNE 30, 2012

Broker	Commission	Broker	Commission
Investment Technology Group, New York	\$ 1,540,550	Instinet Corp., New York	133,746
Credit Suisse, New York	1,510,109	Loop Capital Markets, Jersey City	130,210
Goldman Sachs & Co., New York	686,342	SG Securities, Ltd., London	126,504
Instinet Europe Limited, London	604,381	SG Securities, Hong Kong	120,737
Morgan Stanley & Co. Inc., New York	567,557	Instinet Corp., New York	120,394
Merrill Lynch Pierce Fenner Smith Inc., New York	456,585	Brockhouse & Cooper, Inc., Jersey City	117,370
Deutsche Bk. Secs., Inc., New York	425,015	Jefferies & Co., Inc., New York	109,332
Goldman Sachs Execution & Clearing, New York	346,133	Barclays Capital, London	108,118
Citigroup Gbl. Mkts., Inc., New York	332,808	RBC Capital Markets LLC, New York	107,409
Credit Suisse (Europe), London	296,279	J. P. Morgan Secs. Asia Pacific, Hong Kong	104,921
Bernstein Sanford C & Co., New York	291,556	Liquidnet, Inc., Brooklyn	100,071
UBS Securities LLC, Stamford	241,565	Other Brokers	3,955,546
Citigroup Global Markets, Ltd., London	210,542	Total FY 2012	\$14,576,217
J. P. Morgan Securities, Inc., Brooklyn	199,296	10(4) 1 1 2012	Ψ11,070,E17
Merrill Lynch Pierce Fenner, Wilmington	194,413		
J.P. MORGAN Clearing Corp., New York	184,458		
Nomura Secs. Intl., Inc., New York	177,077		
UBS Equities, London	166,244		
Weeden & Co., New York	165,174		
Sanford C. Bernstein & Co., Inc., London	154,194		
Barclays Capital LE, Jersey City	153,456		
Citigroup Gbl. Mkts./Salomon, New York	149,326		
J. P. Morgan Secs., Ltd., London	148,021		
Investment Technology Group, Ltd., Dublin	140,778		

# SCHEDULE OF INVESTMENT MANAGEMENT FEES AND EXPENSES

FOR THE YEAR ENDED JUNE 30, 2012

(EXPRESSED IN THOUSANDS)

	Assets Under Management		Management Fees and Expenses	
External Management:				
Domestic Managers	\$ 1,624,571	\$	10,427	
Non-U.S. Equity Managers	4,079,063		26,224	
Global Equity Managers	5,277,918		18,306	
Fixed Income Managers	10,212,282		19,325	
Credit Strategies Managers	5,602,086		37,322	
Real Estate Managers	4,352,853		37,376	
Private Equity Managers	4,919,923		62,169	
Hedge Fund Managers	4,412,056		72,025	
Internal Management	12,867,862		19,015	
Miscellaneous Fees and Expenses:				
Custodian fees	-		4,501	
Legal fees	-		529	
Other fees and expenses	-		487	
Total	\$ 53,348,614	\$	307,706	

# **Investment Summary**

In accordance with Section 51.1-124.31 of the *Code of Virginia* (1950), as amended, the Board of Trustees has pooled substantially all assets of the Virginia Retirement System, the State Police Officers' Retirement System, the Virginia Law Officers' Retirement System, the Judicial Retirement System, the Group Life Insurance Fund, the Retiree Health Insurance Credit Fund and the Disability Insurance Trust Fund into a common investment pool. The common investment pool of the pension trust funds and other employee benefit trust funds held the following composition of investments at June 30, 2012 and 2011:

					(EXPRESSED IN THOUSANDS			
		2012 Fair Value	Percent of Total Value		2011 Fair Value	Percent of Total Value		
Bonds and Mortgage Securities:								
U. S. Government and Agencies	\$	2,981,716	5.57%	\$	2,716,450	4.88%		
Mortgage Securities		3,011,596	5.63%		3,316,456	5.96%		
Corporate and Other Bonds		12,815,290	23.95%	L	11,862,833	21.32%		
<b>Total Bonds and Mortgage Securities</b>		18,808,602	35.15%		17,895,739	32.16%		
Common and Preferred Stocks	_	18,590,578	34.74%		21,238,020	38.18%		
Index and Pooled Funds:								
Equity Index and Pooled Funds		5,303,314	9.91%		6,134,348	11.03%		
Fixed Income Commingled Funds		891,098	1.66%		1,892,753	3.40%		
Total Index and Pooled Funds		6,194,412	11.57%		8,027,102	14.43%		
Real Estate		3,784,232	7.07%		3,111,418	5.59%		
Private Equity		5,888,743	11.00%		5,194,663	9.34%		
Short-Term Investments:								
Treasurer of Virginia - LGIP Investment Pool		74,254	0.14%		24,679	0.04%		
TBC Pooled Employee Trust Fund		97,617	0.18%		44,128	0.08%		
Foreign Currencies		82,046	0.15%	L	97,403	0.18%		
Total Short-Term Investments		253,917	0.47%		166,210	0.30%		
Total Investments	\$	5 53,520,484	100.00%	\$	55,633,152	100.00%		
	_							

# actuarial section

Pension Trust Funds:

Actuary's Certification Letter-Pension Plans

Solvency Test

Schedule of Active Member Valuation Data

Schedule of Retiree and Beneficiary Valuation Data

Summary of Actuarial Assumptions and Methods

Summary of Pension Plan Provisions

Summary of Pension Plan Changes

Other Post-Employment Benefit (OPEB) Plan Funds:

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Actuary's Certification Letter-OPEB Plans-

VSDP Long-Term Care Plan

Actuary's Certification Letter-OPEB Plans-

Line of Duty Act Fund

Summary of Actuarial Assumptions and Methods

Summary of OPEB Plan Provisions

Summary of OPEB Plan Changes





will assume a far greater investment role in their future retirement income. However, the defined benefit component will provide a basic foundation of retirement security for future members who choose a career in public service to Virginia.

# Actuary's Certification Letter – Pension Plans



October 30, 2012

#### **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 retirement plans administered by the Virginia Retirement System, prepared as of June 30, 2011:

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

In addition, this report includes information in aggregate on the actuarial valuations of the political subdivisions participating in VRS as of June 30, 2011. We have prepared and provided separately actuarial valuation reports for each of the political subdivisions. Please refer to the individual reports for the valuation results, summary of actuarial assumptions and methods, and plan provisions for each of the political subdivisions.

The purpose of this report is to provide a summary of the funded status of the plans as of June 30, 2011, to recommend rates of contribution, and to provide accounting information under Governmental Accounting Standards Board (GASB) Statements No. 25 and 27. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation results indicate that the employer contribution rates shown in the table on the following page are sufficient to fund the normal cost for all members and finance the unfunded accrued liability of the plans. For comparison, in the table we present the recommended employer contribution rates based on the June 30, 2011 acctuarial valuation and the employer contribution rates adopted for the fiscal years ending June 30, 2011 and 2012.



## **Employer Contribution Rates**

Division	Recommended FY 2013 & FY 2014	6/30/2010 Valuation	Adopted FY 2011 & FY 2012 (4 <sup>th</sup> Quarter)
State Employees	13.07%	13.29%	2.13% & 6.58%
Teachers	16.77%	17.41%	3.93% & 6.33%
State Police	32.62%	33.31%	7.76% & 21.16%
Virginia Law Officers	19.52%	20.31%	5.12%& 13.09%
Judicial	54.11%	55.13%	28.81% & 42.58%
Political Subdivisions			
(Average Rates)	10.63%	11.00%	8.00%*
*Average of rates adopted for all of F	Y 2011 and FY 2012.		

Below are contribution rates adopted for the first three quarters of the 2012 fiscal year:

- State Employees (VRS) 2.08%
- Teachers (VRS) 6.33%
- State Police (SPORS) 7.73%
- Virginia Law Officers (VaLORS) 5.07%
- Judicial (JRS) 28.65%

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

The promised benefits of VRS are included in the calculated contribution rates, which are developed using the entry age normal cost method. The valuation takes into account the differentiation between Plan 1 members, employees hired prior to July 1, 2010, and Plan 2 members, new employees hired on or after July 1, 2010. Five-year smoothed market value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability. In accordance with the supplemental contribution provision of House Bill 30, the portion of the unfunded accrued liability with respect to deferred contributions for the 2010-2012 biennium is amortized using a level-dollar, closed, 10-year period. The balance of the accrued unfunded liability is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 3.00% annually and the amortization period will decrease by one year until reaching the minimum period of 20 years. The June 30, 2011 valuation reflects an increase in the amortization period from 20 to 30 years to phase-in the impact of the previously adopted change in the assumed annual rate of return from 7.50% to 7.00%. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund, and meet the parameters for disclosures under GASB 25 and 27.

We have prepared the Schedule of Funding Progress and Trend Information shown in the Financial Section of the Comprehensive Annual Financial Report and all supporting schedules, including the Schedule of Active Member Valuation Data, the Solvency Test and the Analysis of Financial Experience shown in the Actuarial Section of the Comprehensive Annual Financial Report. For completeness, the table of Changes in Unfunded Actuarial Accrued Liabilities, the Solvency Test and the Retiree and Beneficiary Data include information with



respect to the political subdivisions participating in VRS. All historical information that references a valuation date prior to June 30, 2008 was prepared by a previous actuarial firm.

In addition, the following schedules (or updates to them) were prepared by VRS from information prepared by us during the 2011 and prior actuarial valuations or from supplemental information prepared by us for use in the System's Comprehensive Annual Financial Report. Historical information that references a valuation date prior to June 30, 2008 was prepared by a previous actuarial firm. We have reviewed the following schedules for the periods indicated for inclusion in the System's 2012 Comprehensive Annual Financial Report:

- Schedule of Funding Progress (FY 2002-FY 2005)
- Schedule of Employer Contributions (All Years)
- Solvency Test (FY 2002-FY 2006)
- Schedule of Active Member Valuation Data (FY 2002-FY 2009)
- Schedule of Retirees and Beneficiaries (All Years)

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

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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

Respectfully submitted,

Thomas J Caranaugh Thomas J. Cavanaugh, FSA, FCA, EA, MAA

Chief Executive Officer

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

he Actuarial Section presents information about the assumptions adopted by the Board of Trustees and used by the VRS actuary to evaluate the funded status of the pension plans. This information includes trend data about retirements, disabilities, terminations and salary increase rates. The section also provides summaries of the provisions of and changes to the pension plans administered by the System.

#### ACTUARIAL ASSUMPTIONS AND METHODS - PENSION PLANS

	2002-2004	2005-2009	2010	2011
Investment Rate of Return	8.00%	7.50%	7.00%	7.00%
Inflation Assumption Plan 1 Plan 2	3.00% N/A	2.50% N/A	2.50% N/A	2.50% 2.25%
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Change in Decremental Assumptions	No	Yes	No	No
Value of Ancillary Benefits Included	Yes	Yes	Yes	Yes
Value of Post-Retirement Adjustments to Date Included	Yes	Yes	Yes	Yes
Assets Valuation Method	5-Year, Smoothed Market	5-Year, Smoothed Market	5-Year, Smoothed Market	5-Year, Smoothed Market



**SOLVENCY TEST** (EXPRESSED IN THOUSANDS)

Aggregate Accrued Liabilities for					Portion of Accrued Liabilities		
Valuation Date	(1) Active Member	(2) Retirees and	(3) Active	Valuation	Cc	overed by Asset	is
(June 30)	Contributions	Beneficiaries	Members*	Assets	(1)	(2)	(3)
			Virginia Retireme	ent System (VRS)			
2011 2010 2009 2008 2007	\$ 9,116,662 9,246,421 8,876,564 8,389,773 8,154,046	\$ 37,539,539 35,117,915 31,589,747 29,225,652 23,339,386	\$ 28,528,577 28,436,065 25,856,700 24,939,054 23,623,041	\$ 52,558,997 52,728,575 53,185,033 52,548,375 47,815,450	100.00% 100.00% 100.00% 100.00% 100.00%	100.00% 100.00% 100.00% 100.00% 100.00%	20.69% 29.41% 49.19% 59.88% 56.39%
2006 2005 2004 2003 2002	6,988,172 6,555,402 6,139,908 5,703,557 5,285,338	23,055,815 21,140,882 18,971,864 17,223,070 15,878,494	22,777,916 21,932,204 18,846,578 17,770,944 17,101,328	42,668,752 40,372,648 39,691,562 39,242,624 38,957,256	100.00% 100.00% 100.00% 100.00% 100.00%	100.00% 100.00% 100.00% 100.00% 100.00%	55.43% 57.80% 77.36% 91.81% 104.05%
		State	Police Officers' Ret	irement System (SPC	ORS)		
2011 2010 2009 2008 2007 2006 2005 2004 2003 2002 2011 2010 2009 2008 2007 2006 2005 2004 2005 2004	\$ 74,943 77,759 74,662 71,160 70,796 66,055 62,917 61,529 59,097 57,152 \$174,963 186,792 181,760 173,039 169,393 156,310 148,890 143,836 135,144	\$ 540,097 510,491 474,622 444,025 408,085 378,636 337,017 310,306 277,282 253,687	\$ 370,664 360,642 329,896 329,010 327,147 285,236 273,239 284,509 279,243 283,797	\$ 616,603 633,415 646,960 646,277 594,985 538,646 514,330 510,604 508,576 507,889 irement System (VaLus) \$ 926,082 925,443 912,922 873,473 766,243 656,668 575,327 508,561 457,615	100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%	100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%	0.42% 12.52% 29.61% 39.84% 35.49% 32.94% 41.87% 61.67% 69.43% 0.00% 7.92% 23.03% 31.72% 25.73% 16.61% 19.16% 21.97% 24.26%
2002	127,975	110,426	567,716	418,518	100.00%	100.00%	31.73%
			Judicial Retireme	ent System (JRS)			
2011 2010 2009 2008 2007 2006 2005 2004 2003 2002	\$ 37,981 43,217 41,793 38,785 38,675 34,756 32,143 30,176 28,766 28,089	\$ 312,423 310,305 287,543 271,276 242,825 240,005 229,942 211,228 198,005 186,886	\$ 219,091 206,398 192,127 184,707 160,998 149,637 140,216 124,171 121,265 137,029	\$ 371,051 372,096 378,212 373,850 340,200 302,734 287,825 285,178 282,326 281,056	100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%	100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%	9.42% 9.00% 25.44% 34.54% 36.46% 18.69% 18.36% 35.25% 45.81% 48.22%

<sup>\*</sup>Employer-financed portion.

Aggregate Accrued Liabilities are determined under the entry age normal cost method (System-funded method used to determine employer contribution requirements).

The progress of a retirement system in accumulating assets to pay benefits when due can be measured by examining the extent to which assets accumulated for benefits cover (1) active member contributions to the System; (2) liabilities for future benefits to retirees and beneficiaries; and (3) liabilities for the employerfinanced portion of service already rendered by active members. In a system receiving actuarially determined employer contributions, the liabilities for member contributions and future benefits to retirees and beneficiaries will generally be fully covered by accumulated assets. In addition, the liabilities for service already rendered will be partially covered by the remainder of the accumulated assets and will increase over time.

# SCHEDULE OF ACTIVE MEMBER VALUATION DATA

		Active	Members		
Valuation Date (June 30)	Number	Annual Payroll (000s)	Average Annual Pay	Annualized % Increase in Average Pay	Number of Employers
		Virginia Retireme	nt System (VRS)		
2011 2010 2009 2008 2007 2006 2005 2004 2003 2002	326,357 329,374 333,049 331,851 326,218 320,065 312,981 305,388 300,612 297,921	\$ 14,708,859 14,757,790 14,947,644 14,558,592 13,834,022 13,001,551 12,212,145 11,509,902 10,884,629 10,668,980	\$ 45,070 44,806 44,881 43,871 42,407 40,622 39,019 37,689 36,208 35,811	0.6% -0.2% 2.3% 3.5% 4.4% 4.1% 3.5% 4.1% 1.1% 2.9%	594 592 587 583 578 575 571 565 559
		State Police Officers' Ret	<u> </u>		
2011 2010 2009 2008 2007 2006 2005 2004 2003 2002 2011 2010 2009 2008 2007 2006 2005 2004 2005 2004 2003 2002	1,738 1,767 1,828 1,852 1,890 1,795 1,811 1,755 1,727 1,740 9,631 9,734 10,087 10,213 9,904 9,819 9,746 9,626 10,036	\$ 99,669 97,601 100,974 102,466 100,785 93,742 90,865 82,100 79,020 80,680 Virginia Law Officers' Reti \$ 356,240 346,040 359,070 368,255 341,035 320,869 306,574 298,313 291,801 306,024	\$ 57,347 55,235 55,237 55,327 53,325 52,224 50,174 46,781 45,756 46,368 rement System (VaLOF \$ 36,989 35,550 35,550 35,597 35,512 33,392 32,398 31,222 30,609 30,314 30,493	3.8% 0.0% -0.2% 3.8% 2.1% 4.1% 7.3% 2.2% -1.3% -1.5%  3S)  4.0% -0.1% 0.2% 6.3% 3.1% 3.8% 2.0% 1.0% -0.6% -0.7%	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	10,036	Judicial Retireme		-0.7 %	I
2011	394	\$ 58,919	\$ 149,541	0.0%	1
2010 2009 2008 2007 2006 2005 2004 2003 2002	408 421 412 424 415 414 405 408 408	61,021 62,709 60,486 57,687 54,289 51,874 48,271 47,568 47,568	149,561 148,952 146,811 136,054 130,818 125,300 119,188 116,588 116,588	0.4% 1.5% 7.9% 4.0% 4.4% 5.1% 2.2% 0.0%	1 1 1 1 1 1 1 1

# SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA

Retirees and Beneficiaries

Valuation Date	Adde	d to Rolls	Removed from Rolls Rolls		Rolls	at End of Year	Annualized % Increase in	Average Annual	
(June 30)	Number	Allowances**	Number	Allowances	Number	Allowances	Annual Allowances	Allowance	
Virginia Retirement System (VRS)									
2011 2010 2009 2008 2007 2006 2005 2004 2003* 2002*	11,630 10,780 9,474 9,610 9,475 8,949 9,151 7,913 7,920 7,451	\$248,784,000 234,416,000 278,307,000 284,577,000 277,466,000 190,775,000 187,247,000 167,577,000	4,210 4,011 4,202 3,869 3,774 3,834 4,250 2,561 3,554 3,496	\$31,978,000 65,755,000 63,388,000 68,575,000 66,307,000 33,172,000 48,631,000 29,304,000	152,689 145,269 138,500 133,228 127,487 121,786 116,671 111,770 106,418 102,052	\$2,999,941,000 2,783,135,000 2,614,474,000 2,399,555,000 2,183,553,000 1,972,394,000 1,814,791,000 1,676,175,000 1,537,902,000 1,375,777,000	7.8% 6.5% 9.0% 9.9% 10.7% 8.7% 8.3% 9.0% 11.8% 6.7%	\$19,647 19,158 18,877 18,011 17,128 16,196 15,555 14,997 14,452 13,481	
			State Police	ce Officers' Retire	ment System	(SPORS)			
2011 2010 2009 2008 2007 2006 2005 2004 2003* 2002*	68 62 72 68 52 57 70 56 63 72	\$ 2,954,000 2,450,000 3,604,000 4,207,000 3,292,000 2,378,000 3,035,000 2,717,000	24 22 23 26 18 23 9 4 25	\$ 412,000 1,085,000 777,000 548,000 1,311,000 170,000 210,000 93,000	1,166 1,122 1,082 1,033 991 957 923 862 810 772	\$ 43,768,000 41,226,000 39,861,000 37,034,000 33,375,000 31,394,000 29,186,000 26,361,000 23,737,000 20,077,000	6.2% 3.4% 7.6% 11.0% 6.3% 7.6% 10.7% 11.1% 18.2% 7.1%	\$37,537 36,743 36,840 35,851 33,678 32,805 31,620 30,581 29,305 26,006	
			Virginia Lav	w Officers' Retire	ment System	(VaLORS)			
2011 2010 2009 2008 2007 2006 2005 2004 2003* 2002*	316 281 264 224 253 209 248 207 248 251	\$ 6,677,000 6,667,000 6,903,000 5,774,000 7,118,000 4,692,000 7,541,000 4,554,000	33 24 17 28 16 34 12 2 10	\$ 1,145,000 932,000 671,000 3,817,000 1,393,000 129,000 678,000 113,000	2,601 2,318 2,061 1,814 1,618 1,381 1,206 970 765 527	\$ 57,030,000 51,498,000 45,763,000 39,531,000 37,574,000 31,849,000 27,286,000 20,423,000 15,982,000 9,252,000	10.7% 12.5% 15.8% 5.2% 18.0% 16.7% 33.6% 27.8% 72.7% 324.2%	\$21,926 22,216 22,204 21,792 23,222 23,062 22,625 21,055 20,892 17,556	
			Ju	dicial Retirement	System (JRS	5)			
2011 2010 2009 2008 2007 2006 2005 2004 2003* 2002*	25 29 36 36 24 25 25 33 35	\$ 1,717,000 2,116,000 2,919,000 3,567,000 2,831,000 1,983,000 2,017,000 1,387,000	30 17 20 17 19 21 17 21 26 17	\$ 1,514,000 1,022,000 1,491,000 1,746,000 1,723,000 814,000 70,000 86,000	446 451 439 423 404 399 395 387 375 366	\$ 30,559,000 30,356,000 29,262,000 27,834,000 26,013,000 24,905,000 23,736,000 21,789,000 20,488,000 18,918,000	0.7% 3.7% 5.1% 7.0% 4.4% 4.9% 8.9% 6.4% 8.3% 1.2%	\$68,518 67,308 66,657 65,802 64,390 62,420 60,092 56,302 54,635 51,689	

<sup>\*</sup> Details of the changes in Allowances are unavailable prior to fiscal year 2004.

<sup>\*\*</sup> Additions to Allowances include added retirees and the annual COLA provided to existing retirees and beneficiaries.

# FIGURE 4.1 – ANALYSIS OF ACTUARIAL GAINS AND LOSSES

FOR THE YEAR ENDED JUNE 30, 2011	AIIIAE GAING	AND	LUUULU				(EXPRE	SSED IN THOUSANDS)
	VRS		SPORS		VaLORS		JRS	Total
A. Calculation of Expected Unfunded Actuarial Accrued Liability (UAAL)								
1. UAAL as of June 30, 2010	\$ 20,071,826	\$	315,477	\$	653,878	\$	187,824	\$21,229,005
2. Normal Cost for Previous Year	1,582,627		15,272		41,720		23,523	1,663,142
3. Actual Contributions During the Year	(1,480,782)		(12,343)		(34,423)		(20,338)	(1,547,886)
4. Interest at Previous Year's								
Rate of 7.00%								
a. On UAAL	1,405,028		22,083		45,771		13,148	1,486,030
b. On Normal Cost	110,784		1,069		2,920		1,647	116,420
c. On Contributions	(51,828)		(432)	_	(1,205)		(712)	(54,177)
d. Total	1,463,984		22,720	_	47,486		14,083	1,548,273
5. Expected UAAL as of June 30, 2011								
(A1+A2+A3+A4)	21,637,655		341,126		708,661		205,092	22,892,534
6. Actual UAAL as of June 30, 2011	22,625,731		369,101		757,109		198,443	23,950,384
7. Total Gain/(Loss) (A5-A6)	(988,076)		(27,975)	_	(48,448)		6,649	(1,057,850)
B. Calculation of Asset Gain/(Loss)				_				
1. Actuarial Value of Assets (AVA)								
as of June 30, 2010	52,728,575		633,415		925,443		372,096	54,659,529
2. Contributions During the Year	1,480,782		12,343		34,423		20,338	1,547,886
3. Benefit Payments During the Year	(3,221,981)		(46,538)		(63,800)		(32,120)	(3,364,439)
4. Interest at Previous Year's Rate of 7.00%	(-7 / /		( -,,		(,,		(- / - /	(=7== 7==7
a. On AVA at Beginning of Year	3,691,000		44,339		64,781		26,047	3,826,167
b. On Contributions	51,828		432		1,205		712	54,177
c. On Benefit Payments	(112,769)		(1,629)		(2,233)		(1,124)	(117,755)
d. Total	3,630,059		43,142	_	63,753		25,635	3,762,589
5. Expected AVA as of June 30, 2011								
(B1+B2+B3+B4)	54,617,435		642,362		959,819		385,949	56,605,565
6. Actual AVA as of June 30, 2011	52,558,997		616,603		926,082		371,051	54,472,733
7. Total Gain/(Loss) on Assets (B6-B5		_	(25,759)	_	(33,737)	_	(14,898)	(2,132,832)
			<u></u>	_				·
<ul><li>C. Calculation of Liability Gain/(Loss)</li><li>1. Gain/(Loss) Due to Changes in Actuari Assumptions</li></ul>	al							
2. Gain/(Loss) Due to Plan Amendments	-		-		-		-	-
3. Gain/(Loss) Due to Change in Asset Method	-		-		-		-	
4. Liability Experience Gain/(Loss)				_				
(A7-B7-C1-C2-C3)	\$ 1,070,362	\$	(2,216)	\$	(14,711)	\$	21,547	\$ 1,074,982

# Summary of Actuarial Assumptions and Methods

On April 16, 2009, the VRS Board of Trustees adopted most of the actuarial assumptions and methods presented in Figure 4.2 below on the recommendation of its actuary. At its meeting on June 17, 2010, the Board reduced the assumption for the investment rate of return from 7.50% to 7.00%. These assumptions include the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), the Virginia Law Officers' Retirement System (VaLORS) and the Judicial Retirement System (JRS). They were based on an analysis of plan experience for the four-year period July 1, 2004 through June 30, 2008 and, along with the subsequent change in the assumption for the investment rate of return, were used for the June 30, 2010 and subsequent valuations.

# FIGURE 4.2 - ACTUARIAL ASSUMPTIONS AND METHODS-PENSION PLANS

FOR THE JUNE 30, 2011 VALUATION

Investment Return Rate. 7.00% per annum, compounded annually, composed of an assumed 2.50% inflation rate and a 4.50% real rate of return. Benefits are assumed to increase annually by 2.50% for Plan 1 retirees and by 2.25% for Plan 2 retirees due to the cost-of-living adjustment (COLA).

## Mortality Rates:

- Pre-Retirement: 1994 Group Annuity Mortality Table for males and females with a one-year set back in age for males and females in all employer groups.
- Post-Retirement: 1994 Group Annuity Mortality Table for males and females with a one-year set back in age for male and female state employees and employees of political subdivisions not receiving enhanced hazardous duty benefits; a threeyear set back in age for male and female teachers; and a one-year set back in age for male and female judges. 1994 Group Annuity Mortality Table for males and females with a four-year set back in age for state police officers, political subdivision employees in hazardous duty positions receiving enhanced benefits and other Virginia law enforcement and correctional
- Post-Disablement: 70% of PBGC Disabled Mortality Table 5a for males; 90% of PBGC Disabled Mortality Table 6a for females.

#### FIGURE 4.3 - RETIREMENT RATES-PENSION PLANS

Sample rates of retirement for members eligible to retire are shown below.

#### State Employees

		Pla	n 1		Plan 2			
		vith Less Than of Service		nt with 30 or rs of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	3.00%	3.22%	10.00%	10.00%	0.00%	0.00%	10.00%	10.00%
55	5.00%	5.00%	10.00%	10.00%	0.00%	0.00%	10.00%	10.00%
59	5.00%	5.50%	10.00%	10.00%	0.00%	0.00%	10.00%	10.00%
60	5.00%	5.50%	10.00%	15.00%	5.00%	5.50%	10.00%	15.00%
61	10.00%	10.00%	15.00%	20.00%	10.00%	10.00%	15.00%	20.00%
62	15.00%	15.00%	25.00%	30.00%	15.00%	15.00%	25.00%	30.00%
64	15.00%	15.00%	20.00%	20.00%	15.00%	15.00%	20.00%	20.00%
65	40.00%	40.00%	30.00%	40.00%	40.00%	40.00%	30.00%	40.00%
67	40.00%	40.00%	25.00%	25.00%	40.00%	40.00%	25.00%	25.00%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

FIGURE 4.3 - RETIREMENT RATES-PENSION PLANS, cont.

# **Teachers**

		Pla	n 1	Plan 2				
		vith Less Than of Service		Retirement with 30 or More Years of Service		vith Less Than of Service		
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	2.00%	2.00%	17.50%	15.00%	0.00%	0.00%	17.50%	15.00%
55	5.70%	6.10%	22.50%	22.50%	0.00%	0.00%	22.50%	22.50%
59	7.00%	7.50%	22.50%	22.50%	0.00%	0.00%	22.50%	22.50%
60	7.50%	8.50%	22.50%	22.50%	7.50%	8.50%	22.50%	22.50%
61	11.00%	12.00%	30.00%	30.00%	11.00%	12.00%	30.00%	30.00%
62	17.00%	17.00%	35.00%	40.00%	17.00%	17.00%	35.00%	40.00%
64	18.00%	16.50%	30.00%	25.00%	18.00%	16.50%	30.00%	25.00%
65	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
67	40.00%	40.00%	20.00%	30.00%	40.00%	40.00%	20.00%	30.00%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

		Pla	n 1	Plan 2				
		vith Less Than of Service		nt with 30 or s of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	3.50%	3.50%	13.00%	15.60%	0.00%	0.00%	13.00%	15.60%
55	5.00%	5.00%	11.50%	14.30%	0.00%	0.00%	11.50%	14.30%
59	4.50%	6.00%	13.50%	13.40%	0.00%	0.00%	13.50%	13.40%
60	6.00%	7.50%	17.00%	12.80%	6.00%	7.50%	17.00%	12.80%
61	10.50%	10.00%	19.00%	17.70%	10.50%	10.00%	19.00%	17.70%
62	17.50%	15.50%	31.00%	28.00%	17.50%	15.50%	31.00%	28.00%
64	16.50%	17.00%	29.00%	18.30%	16.50%	17.00%	29.00%	18.30%
65	40.00%	40.00%	41.00%	29.60%	40.00%	40.00%	41.00%	29.60%
67	40.00%	40.00%	24.00%	33.20%	40.00%	40.00%	24.00%	33.20%
> = 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – All Other Employers

		Pla	n 1		Plan 2			
		vith Less Than of Service		nt with 30 or rs of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	5.00%	4.00%	9.00%	8.00%	0.00%	0.00%	9.00%	8.00%
55	5.00%	5.50%	14.00%	11.50%	0.00%	0.00%	14.00%	11.50%
59	6.00%	5.00%	11.00%	11.50%	0.00%	0.00%	11.00%	11.50%
60	6.00%	7.50%	11.00%	13.00%	6.00%	7.50%	11.00%	13.00%
61	10.00%	7.50%	25.00%	17.50%	10.00%	7.50%	25.00%	17.50%
62	17.00%	17.00%	35.00%	25.00%	17.00%	17.00%	35.00%	25.00%
64	15.00%	13.00%	27.00%	17.50%	15.00%	13.00%	25.00%	25.00%
65	40.00%	40.00%	33.00%	40.00%	40.00%	40.00%	25.00%	25.00%
67	40.00%	40.00%	20.00%	25.00%	40.00%	40.00%	33.00%	40.00%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

FIGURE 4.3 - RETIREMENT RATES-PENSION PLANS, cont.

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

Reduced Retirement	Unreduced Retirement
9.00%	25.00%
8.50%	18.00%
13.50%	31.50%
20.00%	35.00%
100.00%	100.00%
	9.00% 8.50% 13.50% 20.00%

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits - All Other Employers

Age	Reduced Retirement	Unreduced Retirement
50	8.50%	25.00%
55	8.50%	17.50%
59	11.50%	28.50%
60	20.00%	35.00%
>=65	100.00%	100.00%

# State Police Officers

Age	Reduced Retirement	Unreduced Retirement
50	10.00%	15.00%
55	10.00%	15.00%
59	12.00%	20.00%
60	25.00%	40.00%
> = 64	100.00%	100.00%

# Virginia Law Officers

Age	Reduced Retirement	Unreduced Retirement
50	9.20%	25.00%
55	9.50%	20.00%
59	12.00%	25.00%
60	20.00%	40.00%
> = 65	100.00%	100.00%

# Judges

Se					
2-11	12	>=13	1-8	9	>=10
0.00%	50.00%	50.00%	0.00%	50.00%	50.00%
50.00%	15.00%	15.00%	50.00%	50.00%	15.00%
15.00% 100.00%	15.00% 100.00%	15.00% 100.00%	15.00% 100.00%	15.00% 100.00%	15.00% 100.00%
	2-11 0.00% 50.00% 15.00%	Years of Service  2-11 12  0.00% 50.00% 50.00% 15.00% 15.00% 15.00%	0.00%       50.00%       50.00%         50.00%       15.00%       15.00%         15.00%       15.00%       15.00%	Years of Service       2-11     12     >=13     1-8       0.00%     50.00%     50.00%     0.00%       50.00%     15.00%     15.00%     50.00%       15.00%     15.00%     15.00%     15.00%	Years of Service         Years of Service           2-11         12         >=13         1-8         9           0.00%         50.00%         50.00%         50.00%         50.00%           50.00%         15.00%         15.00%         50.00%         50.00%           15.00%         15.00%         15.00%         15.00%         15.00%

# FIGURE 4.4 - DISABILITY RATES-PENSION PLANS

As shown below for selected ages.

# State Employees

14% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.1000%	0.0100%	
30	0.2000%	0.1500%	
40	0.2000%	0.2900%	
50	0.5000%	0.5500%	
60	0.8000%	1.0000%	

# **Teachers**

5% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0000%	0.0000%	
30	0.0150%	0.0170%	
40	0.0320%	0.0600%	
50	0.2040%	0.1500%	
60	0.4740%	0.4000%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

14% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0000%	0.0000%	
30	0.1000%	0.1000%	
40	0.3000%	0.1000%	
50	0.4000%	0.4000%	
60	1.2000%	1.0000%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – All Other Employers

14% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0300%	0.0100%	
30	0.1000%	0.0400%	
40	0.2400%	0.1300%	
50	0.5200%	0.4500%	
60	1.3600%	1.1600%	

#### FIGURE 4.4 - DISABILITY RATES-PENSION PLANS, cont.

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

60% of disability cases are assumed to be service-related.

Age	Rate	
20	0.0000%	ı
30	0.0500%	ı
40	0.2400%	ı
50	0.5300%	ı
60	0.8100%	ı

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – All Other Employers

60% of disability cases are assumed to be service-related.

Age	Rate
20	0.0000%
30	0.0400%
40	0.1500%
50	0.5100%
60	0.8500%

# State Police Officers

60% of disability cases are assumed to be service-related.

Age	Rate	1
20	0.0000	)%
30	0.028	1%
40	0.2100	)%
50	0.6750	)%
60	0.0000	)%

# Virginia Law Officers

60% of disability cases are assumed to be service-related.

Age	Rate
20	0.0000%
30	0.0250%
40	0.1810%
50	0.4740%
60	0.6200%

# FIGURE 4.4 - DISABILITY RATES-PENSION PLANS, cont.

# **Judges**

5% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0000%	0.0000%	
30	0.0070%	0.0070%	
40	0.1420%	0.0900%	
50	0.4800%	0.3970%	
60	0.0000%	0.0000%	

## FIGURE 4.5 – TERMINATION RATES-PENSION PLANS

Withdrawal rates are based on age and years of service credit. Sample rates for selected ages and years of service are shown below for causes other than death, disability or retirement.

# State Employees - Plan 1

SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years of Service Credit – Males			Years of Service Credit – Females		
Age	0-2	3-9	10+	0-2	3-9	10+
25	22.00%	13.00%	0.00%	25.50%	16.00%	0.00%
35	17.00%	9.50%	4.50%	19.00%	11.50%	5.00%
45	14.00%	7.50%	2.30%	14.00%	7.50%	2.50%
55	10.00%	5.50%	0.00%	12.00%	6.00%	0.00%
65	12.00%	13.00%	0.00%	13.00%	17.00%	0.00%

# State Employees - Plan 2

SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	of Service Credit –	Males	Years	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	22.00%	13.00%	0.00%	25.50%	16.00%	0.00%
35	17.00%	9.50%	4.50%	19.00%	11.50%	5.00%
45	14.00%	7.50%	2.30%	14.00%	7.50%	2.50%
55	10.00%	5.50%	0.40%	12.00%	6.00%	0.40%
65	12.00%	13.00%	0.00%	13.00%	17.00%	0.00%

## Teachers

## SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	of Service Credit –	Males	Years o	of Service Credit – I	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	15.00%	13.00%	0.80%	14.00%	12.50%	15.00%
35	14.00%	7.00%	3.20%	15.00%	9.70%	4.00%
45	15.00%	8.00%	1.90%	11.50%	6.30%	2.00%
55	14.00%	7.00%	0.00%	12.50%	5.70%	0.00%
65	17.00%	8.30%	0.00%	13.00%	8.00%	0.00%

FIGURE 4.5 - TERMINATION RATES-PENSION PLANS, cont.

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Year	s of Service Credit –	Males	Years	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	21.80%	13.70%	0.00%	23.30%	16.70%	0.00%
35	17.20%	9.70%	5.80%	18.60%	10.60%	5.10%
45	14.30%	7.10%	2.90%	14.80%	7.70%	2.80%
55	10.90%	5.30%	0.70%	11.90%	6.30%	0.00%
65	13.60%	8.20%	0.00%	12.60%	8.20%	0.00%

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – All Other Employers

## SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years of Service Credit – Males			Years of Service Credit – Females		
Age	0-2	3-9	10+	0-2	3-9	10+
25	23.50%	14.00%	0.00%	25.50%	16.50%	0.00%
35	18.50%	10.50%	5.50%	19.00%	11.50%	6.00%
45	15.50%	8.00%	3.00%	15.00%	8.00%	3.50%
55	12.00%	6.50%	1.00%	12.50%	6.50%	0.00%
65	12.00%	8.00%	0.00%	13.00%	9.00%	0.00%

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

## SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years of Service Credit – Males			Years of Service Credit – Females		
Age	0-2	3-9	10+	0-2	3-9	10+
25	7.80%	6.80%	0.00%	7.80%	6.80%	0.00%
35	8.00%	4.40%	2.40%	8.00%	4.40%	2.40%
45	9.20%	4.60%	1.50%	9.20%	4.60%	1.50%
55	8.30%	6.30%	0.00%	8.30%	6.30%	0.00%
65	8.70%	6.50%	0.00%	8.70%	6.50%	0.00%

FIGURE 4.5 - TERMINATION RATES-PENSION PLANS, cont.

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – All Other Employers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years of Service Credit – Males			Years of Service Credit – Females		
Age	0-2	3-9	10+	0-2	3-9	10+
25	10.70%	8.30%	0.00%	10.70%	8.30%	0.00%
35	10.90%	6.30%	3.30%	10.90%	6.30%	3.30%
45	8.70%	5.20%	1.80%	8.70%	5.20%	1.80%
55	10.90%	6.30%	0.50%	10.90%	6.30%	0.50%
60	8.20%	7.70%	0.50%	8.20%	7.70%	0.50%

# State Police Officers

## SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years of Service Credit – Males			Years of Service Credit – Females		
Age	0-2	3-9	10+	0-2	3-9	10+
25	7.50%	5.50%	3.00%	14.10%	8.80%	4.40%
35	7.50%	4.80%	2.40%	14.50%	7.30%	6.10%
45	10.00%	4.50%	1.40%	11.70%	7.90%	5.90%
55	10.00%	6.70%	1.20%	6.10%	10.60%	4.10%
65	10.00%	7.50%	1.20%	0.50%	15.40%	0.60%

# Virginia Law Officers

#### SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	s of Service Credit –	Males	Years	of Service Credit – F	- emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	20.00%	15.00%	5.00%	20.00%	15.00%	7.50%
35	20.00%	12.50%	5.00%	20.00%	12.50%	7.50%
45	15.00%	10.50%	4.00%	17.50%	8.00%	5.90%
55	12.00%	6.50%	4.00%	10.00%	12.00%	6.00%
65	15.00%	7.00%	4.00%	10.00%	10.00%	6.00%

# **Judges**

There are no assumed rates of withdrawal prior to service retirement for causes other than death, disability or retirement.

#### FIGURE 4.6 - SALARY INCREASE RATES-PENSION PLANS

Sample salary increase rates are shown below.

# State Employees

Inflation of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown. It is assumed state employees covered under the Virginia Sickness and Disability Program (VSDP) receive a 3.75% annual increase in pay while disabled. This adjusted pay is used to determine deferred retirement benefits payable from the System.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.85%	5.60%	
3	1.25%	5.00%	
6	0.95%	4.70%	
9	0.50%	4.25%	
11	0.15%	3.90%	
15	0.15%	3.90%	
19	0.15%	3.90%	
20 or more	0.00%	3.75%	

## **Teachers**

Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	2.45%	6.20%	
3	2.35%	6.10%	
6	1.95%	5.70%	
9	1.85%	5.60%	
11	1.35%	5.10%	
15	1.15%	4.90%	
19	0.95%	4.70%	
20 or more	0.00%	3.75%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.85%	5.60%	
3	1.25%	5.00%	
6	0.95%	4.70%	
9	0.50%	4.25%	
11	0.15%	3.90%	
15	0.15%	3.90%	
19	0.15%	3.90%	
20 or more	0.00%	3.75%	

#### FIGURE 4.6 - SALARY INCREASE RATES-PENSION PLANS, cont.

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – All Other Employers

Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.85%	5.60%	
3	1.25%	5.00%	
6	0.95%	4.70%	
9	0.50%	4.25%	
11	0.15%	3.90%	
15	0.15%	3.90%	
19	0.15%	3.90%	
20 or more	0.00%	3.75%	

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – All Other Employers

Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

#### FIGURE 4.6 - SALARY INCREASE RATES-PENSION PLANS, cont.

## State Police Officers

Inflation of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown. It is assumed state police who are covered under the Virginia Sickness and Disability Program (VSDP) receive a 3.50% annual increase in pay while disabled. This adjusted pay is used to determine deferred retirement benefits payable from the System.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

# Virginia Law Officers

Inflation of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown. It is assumed Virginia law officers who are covered under the Virginia Sickness and Disability Program (VSDP) receive a 3.50% annual increase in pay while disabled. This adjusted pay is used to determine deferred retirement benefits payable from the System.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

## **Judges**

Salary increase rates are 4.50%.

# ADDITIONAL INFORMATION ABOUT ACTUARIAL ASSUMPTIONS AND METHODS – PENSION PLANS

Percent Electing a Refund or Deferred Annuity (excluding JRS Members). Terminating members are assumed to elect a refund of their member contributions and accrued interest or a deferred annuity based on the option any given member would consider most valuable at the time of termination. The deferred annuity, if elected, is assumed to commence at the age at which the member first becomes eligible for an unreduced benefit.

Provision for Expense. The assumed investment return represents the anticipated net rate of return after payment of all administrative expenses.

Asset Valuation Method. The actuarial value of assets is equal to the market value of assets, adjusted for a five-year phase-in of the excess or shortfall between expected investment returns and actual income, both based on market value, with the resulting value not being less than 80% or more than 120% of the market value of assets.

Actuarial Cost Method. The valuation was prepared using the entry age normal actuarial cost method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contributions that, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on the member's behalf.

The unfunded actuarial accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the Present value of expected benefits to be paid from VRS. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.

Actuarial Gains and Losses. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability and are amortized as part of that balance.

Payroll Growth Rates. For state employees, teachers and members of SPORS, VaLORS and JRS, the payroll growth rate is assumed to be 3.00% based on a zero population growth assumption. For political subdivision employees, the payroll growth rate also is assumed to be 3.00% based on a zero population growth assumption.

Funding Period. For all members, the funding period is 30-year open amortization, computed as a level percent of covered payroll.

Cost-of-Living Adjustment (COLA). For Plan 1 employees, the COLA is assumed to be 2.50% per year compounded annually for the Basic Benefit option. The hazardous duty supplement for Plan 1 SPORS members, VaLORS members and political subdivision employees receiving enhanced hazardous duty benefits is assumed to increase at an inflation rate of 2.50% per year compounded annually. For Plan 2 employees, the inflation rate is assumed to be 2.25% per year compounded annually.

# Summary of Pension Plan Provisions

# **Retirement Plans**

#### **ADMINISTRATION**

The Virginia Retirement System (the System) pension Plan 1 and Plan 2 are administered by the Board of Trustees of the System. Plan 2 was established during the 2010 session of the General Assembly, and its provisions are effective for new members hired or rehired on or after July 1, 2010.

#### TYPE OF PLANS

1. Virginia Retirement System (VRS), effective March 1, 1952. VRS is a qualified governmental pension system that administers two defined benefit plans, the VRS Plan 1 and the VRS Plan 2. The Governmental Accounting Standards Board (GASB) defines VRS as an agent multipleemployer public employee retirement system. Covered employees include full-time permanent, salaried state employees; faculty members of the state's public colleges and universities who do not elect to participate in an optional retirement plan; teachers and administrative employees of the state's local public school divisions; and employees of Virginia cities, towns, counties and other political subdivisions that have elected to participate in VRS. Some part-time permanent, salaried state employees also are covered under VRS. VRS has separate costsharing pools for state and school employers.

Members are covered under Plan 1 or Plan 2 according to their membership date:

Members hired before July 1, 2010 are covered under Plan 1. These members include deferred members who have returned to covered employment with service credit in VRS or an account balance in an optional retirement plan

- (ORP) authorized or administered by VRS as of June 30, 2010 and members retired under Plan 1 who have returned to covered employment and resumed active membership.
- Members hired or rehired on or after July 1, 2010 are covered under Plan 2. These members include those employed in a covered position before July 1, 2010 who left covered employment, took a refund and returned to covered employment on or after July 1, 2010 with no service credit in VRS or no ORP account balance.
- 2. Single-Employer Public Employee Retirement Systems as Defined by GASB. The provisions for membership in Plan 1 and Plan 2 for the following systems are the same as those for VRS:
- State Police Officers' Retirement System (SPORS) established July 1, 1950 for full-time permanent, salaried state police officers
- Virginia Law Officers' Retirement System (VaLORS) established October 1, 1999 for fulltime permanent, salaried Virginia law officers other than state police
- Judicial Retirement System (JRS) established July 1, 1970 for full-time permanent, salaried state judges and other qualifying employees



# MEMBER CONTRIBUTIONS

The member contribution is 5.00% of the member's compensation. Contributions paid by employers on behalf of employees are governed by Section 414(h) of the Internal Revenue Code. Members' contribution accounts accrue 4.00% interest each year, calculated on the balance as of the previous June 30.

#### PLAN 1

#### PLAN 2

State employees, excluding state elected officials, judges and optional retirement plan participants, contribute 5.00% of their compensation each month to their member contribution accounts.

State employees contribute 5.00% of their compensation each month to their member contribution accounts.

Employees of school divisions and political subdivisions may contribute some or all of the 5.00% member contribution, as elected by the employer.

Same as Plan 1.

# COMPENSATION AND AVERAGE FINAL COMPENSATION

Compensation is the member's salary reported to VRS by the employer. It does not include payments for overtime, temporary employment, extra duties or other additional payments.

#### PLAN 1

#### PLAN 2

Average of the member's 36 consecutive months of highest compensation as a covered employee.

Average of the member's 60 consecutive months of highest compensation as a covered employee.

#### **VESTING**

Plan 1 and Plan 2 members become vested after accumulating five years of service credit.

# SERVICE CREDIT

- 1. VRS, SPORS and VaLORS Members in Plan 1 and Plan 2. These members receive one month of service credit for each month they are employed in a covered position and the employer is contributing to the System.
- 2. JRS Members in Plan 1. Judges appointed or elected before January 1, 1995 receive one month of service credit multiplied by a weighting factor of 3.5 for each month they are employed in a JRS-covered position and the employer is contributing to the System. The weighting factor for judges appointed or elected on or after January 1, 1995 is 2.5.
- 3. JRS Members in Plan 2. Judges appointed or elected on or after July 1, 2010 receive one month of service credit multiplied by the following weighting factors for each month they are employed in a JRS-covered position and the employer is contributing to the System: 1.5 for those appointed or elected before age 45; 2.0 for those appointed or elected between the ages 45 and 54; and 2.5 for those appointed or elected at age 55 or older.

#### PRIOR SERVICE CREDIT

Members may purchase prior service as credit in their plan. Eligible prior service includes active duty military service; full-time salaried federal service; full-time salaried public service with an employer or school system of another state or United States territory, or with a Virginia public employer that does not participate in VRS; non-covered service with a VRS-participating employer; approved leave from a VRS-covered position for the birth or adoption of a child; approved educational leave; unused sick leave at retirement, if the member is eligible; and VRS-refunded service. Members also

can apply for no-cost military leave, provided they are not dishonorably discharged, return to covered employment within one year of discharge and do not take a refund of their member contributions and interest.

Prior service credit counts toward vesting, eligibility for retirement and eligibility for the health insurance credit. Prior service credit for refunded VRS hazardous duty service or for an eligible period of leave while covered under VRS in a hazardous duty position also counts toward the hazardous duty supplement for eligible members, provided they purchase or, in the case of no-cost military leave, are granted this service. Other types of prior service credit, such as active duty military service or

hazardous duty service with a non-VRS participating employer, do not count toward the supplement.

Members may arrange to purchase prior service through a lump-sum payment using a personal check, a trustee-to-trustee transfer of funds or a pretax rollover of funds; an after-tax payroll deduction contract or a pre-tax salary reduction contract (if the employer offers the pre-tax salary reduction option); or a combination of these methods. Members must be within their eligibility period to use a contract. Other special rules and limits govern the purchase of prior service.

The cost basis and eligibility periods for Plan 1 and Plan 2 members are as follows:

#### PLAN 1

Within three years of becoming eligible: 5.00% of compensation or average final compensation at the time of purchase, whichever is higher, multiplied by the number of months to purchase. If the member uses a contract to purchase service, the cost is based on compensation, even if average final compensation is higher.

After the three-year eligibility period: Actuarial equivalent rate.

#### PLAN 2

Within one year of becoming eligible: Approximate normal cost rate as a percentage of compensation or average final compensation at the time of purchase, whichever is higher, multiplied by the number of months to purchase. If the member uses a contract to purchase service, the cost is based on compensation, even if average final compensation is higher. Normal cost rates vary depending on whether the member is covered under VRS, SPORS, VaLORS or JRS, or employed in a political subdivision position eligible for enhanced hazardous duty coverage.

After the one-year eligibility period: Actuarial equivalent rate.

VRS refunded service: 5.00% of compensation or average final compensation at the time of purchase, whichever is higher, multiplied by the number of months to purchase. If the member uses a contract to purchase VRS refunded service, the cost is based on compensation, even if average final compensation is higher. If the member has not purchased VRS refunded service within three years, the cost basis will remain 5.00%, but the member will be required to use a lump-sum payment.

Same as Plan 1.

# NORMAL (UNREDUCED) AND REDUCED RETIREMENT ELIGIBILITY AND BENEFIT CALCULATIONS

	PLAN 1	PLAN 2	BENEFIT CALCULATIONS	
Earliest Unreduced Retirement Eligibility	VRS: Age 65 with at least five years of service credit or age 50 with at least 30 years of service credit.	Normal Social Security retirement age with at least five years of service credit or when age and service equal 90. <i>Example:</i> Age 60 with 30 years of service credit.	1.70% of average final compensation for each year of service credit.	
	SPORS, VaLORS and political subdivision hazardous duty employees: Age 60 with at least five years of service credit or age 50 with at least 25 years of service credit.	Same as Plan 1.	SPORS, sheriffs and regional jail superintendents: 1.85% of average final compensation for each year of service credit.  VaLORS: 1.70% or 2.00% of average final compensation for each year of service credit. <i>Note:</i> VaLORS members retiring under the 2.00% multiplier are not eligible for the hazardous duty supplement.  Political subdivision hazardous duty employees: 1.70% or 1.85% of average final compensation for each year of service credit, as elected by the employer.	
	JRS: Age 65 with at least five years of service credit or age 60 with at least 30 years of service credit.	Same as Plan 1.	1.70% of average final compensation for each year of service credit.	
Earliest Reduced Retirement Eligibility	VRS: Age 55 with at least five years of service credit or age 50 with at least 10 years of service credit.	Age 60 with at least five years of service credit.	All members: 0.5% per month for the first 60 months of retirement and 0.4% per month for the next 60 months of retirement. The	
	SPORS, VaLORS and political subdivision hazardous duty employees: Age 50 with at least five years of service credit.	Same as Plan 1.	reduction is applied for each month until the member reaches age 65 or, if more favorable to the member, for each month the member's service credit is less	
	JRS: Age 55 with at least five years of service credit.	Same as Plan 1.	than 30 years (less than 25 years for hazardous duty members).	

#### BENEFIT PAYOUT OPTIONS

Under Plan 1 and Plan 2, members eligible for retirement must elect one of the following benefit payout options when they apply for retirement. This election is irrevocable, except for the Survivor Option under certain circumstances. These options are available on an actuarially equivalent basis:

- 1. Basic Benefit. Members may choose the Basic Benefit, which is the unreduced benefit amount. An early retirement reduction factor is applied for the reduced benefit. The Basic Benefit does not provide a continuation of a lifetime monthly benefit to a survivor.
- 2. Survivor Option. Members may choose a whole percentage of their benefit, between 10% and 100%, to continue as a lifetime benefit to a survivor upon their death. The member's benefit is actuarially reduced accordingly.
- 3. Partial Lump-Sum Option Payment (PLOP). Members who are in active service for one or more years beyond the date they become eligible for an unreduced retirement benefit may elect a partial lump-sum payment of their member contributions and accrued interest equal to one, two or three times their annual retirement benefit, depending on how long they work beyond their unreduced retirement eligibility date. The monthly benefit is actuarially reduced accordingly. This option is available with the Basic Benefit and the Survivor Option.
- 4. Advance Pension Option. With this option, members elect to receive a temporary higher benefit until at least age 62 up to their normal retirement age under Social Security, as elected by the member. At that point, the monthly benefit is permanently reduced on an actuarially equivalent basis. The benefit can never be reduced by more than 50%.

#### **PAYMENT FORM**

The retirement benefit is paid as a lifetime monthly annuity. Upon the member's death in retirement, the member's beneficiary receives a lump-sum payment of any remaining member contributions and accrued interest in the member's account. If the member has elected the Survivor Option, a lifetime monthly benefit is paid to his or her survivor instead of a lump-sum payment.

#### HAZARDOUS DUTY SUPPLEMENT

An annual supplement is payable to members of SPORS and VRS political subdivision members eligible for enhanced hazardous duty coverage who retire with at least 20 years of eligible hazardous duty service credit. The supplement begins when they retire and continues until they reach their normal retirement age under Social Security. VaLORS members retiring under the 1.70% multiplier who have at least 20 years of eligible hazardous duty service credit receive the supplement beginning when they retire and continuing until age 65; VaLORS members retiring under the 2.00% multiplier are not eligible for the supplement. Vested members hired in eligible hazardous duty positions before July 1, 1974 are not required to have 20 years of hazardous duty service credit to qualify for the supplement, provided they take an immediate annuity.

The supplement is a dollar amount added to the member's monthly retirement benefit payment. It is adjusted biennially based on increases in Social Security benefits during interim periods, as determined by the VRS actuary.

# COST-OF-LIVING ADJUSTMENT (COLA)

Retirees qualify for a cost-of-living adjustment (COLA) on July 1 of the second calendar year after they retire. The COLA is effective each July 1 thereafter, when provided. During periods of no inflation or deflation, the COLA is zero (0.00%).

The COLA is calculated based on changes in the Consumer Price Index for all Urban Consumers (CPI-U) as follows:

- 1. The CPI-U for the most recent calendar year used to determine the VRS COLA is subtracted from the most recent average annual CPI-U to arrive at the index point change.
- 2. The index point change is divided by the CPI-U for the most recent calendar year in which a COLA was paid.
- 3. The result is multiplied by 100 to convert it to a percentage.

Under Plan 1, the COLA matches the first 3.00% increase in the CPI-U and half the remaining increase, not to exceed a maximum COLA of 5.00%. Under Plan 2, the COLA matches the first 2.00% increase in the CPI-U and half the remaining increase, not to exceed a maximum COLA of 6.00%.

# Refunds and Deferred Membership

- 1. Refunds. Vested members under Plan 1 and Plan 2 who leave or are involuntarily separated from employment for causes other than job performance or misconduct are eligible for a full refund of their member contribution account balance, including accrued interest. Non-vested members are eligible for a refund of the balance, excluding any employerpaid member contributions made to their accounts after July 1, 2010 and the accrued interest on these contributions. Taking a refund cancels membership and eligibility for any future benefits under the retirement plans. Plan 1 members who take a refund and return to covered employment on or after July 1, 2010 are rehired under Plan 2. They are eligible to purchase their VRS refunded service as credit in Plan 2.
- 2. Deferred membership. Members separating from employment have the option to leave their funds with VRS and become deferred members. If they are

vested or involuntarily separated from employment, they may be eligible for a future retirement benefit if they meet the age and service requirements for their plan. The benefit is calculated based on the member's service credit and average final compensation at the time of separation. Upon the member's death, the member's beneficiary receives a lump-sum payment of any remaining member contributions and accrued interest. If the member retires and elects the Survivor Option, a lifetime monthly benefit is paid to the survivor upon the member's death.

Deferred members remain eligible to receive a full or partial refund of their member contribution account balance, depending on whether or not they are vested. If a deferred member returns to covered employment, member contributions and the service credit the member earns upon reemployment are added to the member's record.

# Death-in-Service Benefit

If a member dies while in active service, his or her named beneficiary or spouse, natural or legally adopted minor child or parent may be eligible for a death-in-service benefit in addition to VRS life insurance benefits, if applicable.

# NON-WORK RELATED CAUSE OF DEATH

If the member dies from a non-work related cause, the member's named beneficiary will be eligible for a refund of any funds remaining in the member's contribution account. If the member is vested at the time of death and his or her spouse, natural or legally adopted minor child or parent is one of the member's named beneficiaries or is the beneficiary based on order of precedence, he or she will be eligible for a refund or a monthly benefit to the exclusion of all other primary beneficiaries. Any benefits minor children receive will end when they reach age 18. If the member is not vested at the time of death, his or her spouse, natural or legally adopted minor child or parent will be eligible for

a refund only, which will be shared with any other primary beneficiaries the member has designated, if applicable.

The monthly non-work related benefit is a lifetime monthly annuity based on the 100% Survivor Option. Members covered under Plan 1 who die before age 55 are assumed to be age 55 at the time of death for the purpose of calculating the benefit. The calculation for members covered under Plan 2 uses age 60. The calculation for Plan 1 and Plan 2 members of SPORS and VaLORS and members of VRS who are eligible for enhanced hazardous duty coverage uses age 50.

#### **WORK-RELATED CAUSE OF DEATH**

If the member dies from a work-related cause, the member's named beneficiary will be eligible for a lump-sum payment of any funds remaining in the member's contribution account. In addition, the member's spouse, natural or legally adopted minor child or parent will be eligible for a monthly benefit, whether or not this individual is a named beneficiary.

The monthly work-related benefit is a lifetime monthly annuity based on 331/3% of the member's average final compensation if the spouse, minor child or parent qualifies for Social Security survivor benefits, or 50% of the member's average final compensation if the spouse, minor child or parent does not qualify for Social Security survivor benefits. The benefit is then adjusted by any workers' compensation survivor benefits.

# **Disability Benefits**

#### **DISABILITY RETIREMENT**

Members who are not covered under the Virginia Sickness and Disability Program (VSDP) are eligible to apply for disability retirement from the first day of covered employment if they have a physical or cognitive disability that prevents them from performing their job and is likely to be permanent.

Members covered under Plan 1 and Plan 2 who retire on disability before age 60 are credited with the lesser of (1) twice their total service credit at disability retirement; or (2) their total service credit plus the number of years remaining between their age at disability retirement and age 60.

The disability benefit for non-vested members is the minimum guaranteed benefit, which is either (1) 50% of the member's average final compensation (662/3% if the disability is work-related) if the member does not qualify for primary Social Security benefits; or (2) 331/3% of average final compensation (50% if the disability is work-related) if the member qualifies for primary Social Security benefits.

Vested members receive the greater of the minimum guaranteed benefit or 1.70% of average final compensation for each year of service credit at the time of disability retirement. The benefit for members retiring on work-related disability is reduced by any workers' compensation benefits. The payout options available to members retiring on disability are the Basic Benefit and Survivor Option.

#### VIRGINIA SICKNESS AND DISABILITY PROGRAM

The Virginia Sickness and Disability Program (VSDP) was established on January 1, 1999 to provide state employees covered under VRS, SPORS and VaLORS income protection if they suffer a non-work related or work-related illness or injury. Enrollment in VSDP is automatic upon employment. State employees hired before January 1, 1999 had the option to elect VSDP or retain their eligibility to be considered for disability retirement. Employees enrolled in VSDP are not eligible to retire on disability. Additional information about VSDP is provided in the "Summary of Other Post-Employment Benefit (OPEB) Plan Provisions" in the next discussion on OPEBs. Additional information also is provided in the Financial Section.

# Summary of Pension Plan Changes

The following actuarially material changes have occurred to the pension plan provisions in recent years.

**2002 VALUATION** - No actuarially material changes are made to the plan provisions.

**2003 VALUATION** — No actuarially material changes are made to the plan provisions. There are two changes of note:

- 1. School superintendents with five years of service credit become eligible to purchase an additional 10 years of out-of-state school service, provided the service does not qualify the superintendent for a benefit under the out-of-state school's retirement plan.
- 2. The Advance Pension Option is added as a benefit payout option. Members may elect to receive a temporary higher benefit until at least age 62 up to their normal retirement age under Social Security, as elected by the member. At that point, the benefit is permanently reduced. The benefit can never be reduced below 50% of the member's Basic Benefit. COLAs are calculated on the Basic Benefit amount.

**2004 VALUATION** - No actuarially material changes are made to the plan provisions.

**2005 VALUATION** — No actuarially material changes are made to the plan provisions. On May 19, 2005, the Board adopts the recommended economic and demographic assumptions proposed by the actuary as a result of the June 2004 actuarial experience study.

**2006 VALUATION** — No actuarially material changes are made to the plan provisions.

**2007 VALUATION** – The retirement multiplier for VRS-covered sheriffs and SPORS members changes from 1.70% to 1.85% of average final compensation, effective July 1, 2008.

**2008 VALUATION** — No actuarially material changes are made to the plan provisions.

**2009 VALUATION** — No actuarially material changes are made to the plan provisions. There are three changes of note:

1. On April 16, 2009, the Board adopts the recommended economic and demographic assumptions proposed by the actuary as a result of the June 2008 experience study.

- 2. The temporary retirement supplement for SPORS members, VaLORS members and political subdivision employees eligible for enhanced hazardous duty coverage changes from \$11,508 to \$12,456 annually.
- 3. For the June 30, 2009 valuation, the Board suspends application of the 80% to 120% market value-of-assets corridor on the actuarial value of assets.

**2010** VALUATION - No actuarially material changes are made to the plan provisions. There are two changes of note:

- 1. For the June 30, 2010 valuation, the application of the 80% to 120% market value-of-assets corridor on the actuarial value of assets is reinstated.
- 2. The Board reduces the investment rate-of-return assumption from 7.50% to 7.00%.

**2011 VALUATION** — In 2010, VRS adopts a second retirement plan, Plan 2. All employees hired on or after July 1, 2010 are automatically enrolled in this plan. The differences between Plan 1 and Plan 2 are listed below:

- 1. Under Plan 2, average final compensation is based on the highest 60 consecutive months of service.
- 2. The Plan 2 cost-of-living adjustment (COLA) is based on the first 2.00% increase in the Consumer Price Index for all Urban Consumers (CPI-U) plus half of each percent from 2.00% to 10.00%, with a maximum COLA of 6.00%.
- 3. Under Plan 2, normal retirement age is Social Security normal retirement age with at least five years of service credit. A Plan 2 member is eligible for unreduced early retirement when the sum of his or her age plus service credit is 90 (Rule of 90). Eligibility for reduced early retirement is at age 60 with five years of service credit.
- 4. Weighted service factors for first-term Plan 2 judges are 1.5 for judges less than age 45; 2.0 for judges age 45-54; and 2.5 for judges age 55 or older.

New general state employees, teachers and general political subdivision employees under VRS are subject to changes 1, 2 and 3 above. New state police officers (SPORS), Virginia law officers (VaLORS) and political subdivision employees eligible for enhanced hazardous duty coverage (VRS) are subject to changes 1 and 2 above. New employees covered under JRS are subject to changes 1, 2 and 4 above.

# Actuary's Certification Letter – OPEB Plans



The experience and dedication you deserve

October 31, 2012

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

Dear Trustees:

Governmental Accounting Standards Board (GASB) Statements No. 43 and 45 require actuarial valuations of retiree medical and other post-employment benefit (OPEB) plans. Cavanaugh Macdonald Consulting, LLC (CMC) is submitting the results of the annual actuarial valuation of the Virginia Retirement System (VRS) Group Life Insurance Program, the Retiree Health Insurance Credit Program and the Virginia Sickness and Disability Program (VSDP) prepared as of June 30, 2011. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

Group Life Insurance Program. This valuation covers only the portion of the Group Life Insurance Program that provides benefits for current and future retirees. This valuation does not value the plan's benefits for members who die while they are active employees. Active death benefits are covered under a group life insurance arrangement. The valuation indicates that the Annual Required Contribution (ARC) under GASB Statements No. 43 and 45 is 0.97% of active payroll. Adjusted to include the costs for deaths in active service, the total for the plan is 1.32% of active payroll. Contribution rates for VRS employers are established every two years. The actuarially calculated employer contribution rates based on the current valuation are for fiscal years ending 2013 and 2014.

Retiree Health Insurance Credit Program. The valuation indicates that the Annual Required Contribution (ARC) under GASB Statements No. 43 and 45 is 1.05% of active payroll for state employees, including state police (SPORS), judicial employees (JRS), Virginia law officers (VaLORS), Optional Retirement Plan (ORP) participants, and the University of Virginia (UVA) members on active payroll; 1.17% of active teachers' payroll; and varying percentages of active payroll for employees of political subdivisions that have elected to provide this benefit. Contribution rates for VRS employers are established every two years. The actuarially calculated employer contribution rates based on the current valuation are for fiscal years ending 2013 and 2014.

Virginia Sickness and Disability Program. The valuation indicates that the Annual Required Contribution (ARC) under GASB Statements No. 43 and 45 for long-term disability (LTD) benefits is 0.59% of active payroll for members covered by VSDP. Contribution rates for VRS employers are established every two years. The actuarially calculated employer contribution rates based on the current valuation are for fiscal years ending 2013 and 2014.

The promised post-employment death benefit under the Group Life Insurance Program and the health care benefits under the Retiree Health Insurance Credit Program of VRS are included in the actuarially calculated contribution rates, which were developed using the entry age normal actuarial cost method with projected benefits. The promised long-term disability benefits of VSDP are included in the actuarially calculated contribution rates, which were developed using the projected unit credit actuarial cost method with projected benefits. Five-year smoothed market value of assets is used for actuarial valuation purposes for the Group Life Insurance Program and the Retiree Health Insurance Credit Program.

The actual market value of assets is used to actuarial valuation purposes for VSDP. GASB requires that the discount rate used to value a plan be based on the likely return of the assets held in trust to pay benefits. As of June 30, 2011, each of the plans had assets in trust solely to provide benefits to retirees and beneficiaries. Therefore, the discount rate has been set at 7.00%. The unfunded accrued liability is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period on the assumption that payroll will increase by 3.00% annually. The assumptions recommended by the actuary are in the aggregate reasonably related to the experience under each of the Plans and to reasonable expectations of anticipated experience under each of the Plans, and meet the parameters for the disclosures under GASB 43 and 45.

The valuations reflect an increase in the amortization period to 30 years to phase in the impact of the previously adopted change in the assumed annual rate of return from 7.50% to 7.00%. In future valuations, the amortization period will decrease by one each year until reaching 20 years, at which point it is expected to remain at 20 years. Additionally, the valuations also take into account the differentiation between Plan 1 members, employees hired prior to July 1, 2010, and Plan 2 members, new members hired on or after July 1, 2010. Also, the assumptions for benefit offsets of the LTD plan have been modified to be consistent with recent experience. Lastly, the assumed rates of disability continuance have been adjusted in the first 12 months to reflect VRS experience.

The liability associated with long-term care (LTC) benefits was calculated by Milliman. All historical information that references a valuation date prior to June 30, 2008 was prepared by a previous actuarial firm.

The following schedules (or updates to them) were prepared by VRS from information prepared by us during the 2011 actuarial valuation or from supplemental information prepared by us for use in the System's Comprehensive Annual Financial Report. We have reviewed them for inclusion in the 2011 Comprehensive Annual Financial Report:

- Schedule of Funding Progress
- Schedule of Actuarial Methods and Significant Assumptions
- Schedule of Employer Contributions
- Schedules of Selected Experience Rates

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 valuations were 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 individual Plans and on actuarial assumptions that are internally consistent and reasonably based on the actuarial experience of the System and the individual Plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in Plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Respectfully submitted,

Jose I. Fernandez, ASA, FCA, EA, MAAA Principal and Consulting Actuary Eric H. Gary, FSA, FCA, MAAA

Senior Actuary

# Actuary's Certification Letter — OPEB Plans-VSDP Long-Term Care Plan



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milliman.com

October 31, 2012

#### **Board of Trustees**

Virginia Retirement System 1200 E. Main Street Richmond, VA 23219

Dear Trustees:

#### **Purpose**

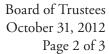
This report presents the required disclosures to comply with the Government Accounting Standards Board (GASB) No. 43 based on the results of the June 30, 2011 actuarial valuation of the self-funded long-term care (LTC) benefits provided to the Virginia Sickness and Disability Program (VSDP) eligible members. This benefit program is an employer-paid self-funded plan. The funding for this plan is a percent of payroll determined by the Board to sustain both the active and ported group long-term care benefits.

This report determines the funded status of the program under the parameters of GASB Statement No. 43 and calculates the annual required contribution sufficient to fund the program's normal cost and amortize any unfunded liability over a period not to exceed 30 years. We have used an amortization period of 30 years for this valuation. The results of this report apply to the plan's fiscal year ending June 30, 2011.

# Liabilities and Costs

Section II of the actuarial valuation report provides the results of the calculations of liabilities and annual required contributions of the program under the Unit Credit Cost Method. The Actuarial Liability represents the present value of long-term care benefits allocated to the service of active participants performed up to the valuation date. The unfunded actuarial accrued liability equals the difference between the total actuarial accrued liability and the value of the assets accumulated for the future payment of benefits. The normal cost represents the annual ongoing cost of the post-retirement benefits accruing to active participants.

The required level of funding for the LTC program is 0.117% of payroll from each participating employer. This contribution funds both current employee and future retiree benefits. This valuation is the fourth one to determine the actuarial accrued liabilities and GASB Statement No. 43-compliant required funding necessary to fund the retiree long-term care benefits.





For this year's valuation we did not make any substantial changes to the key pricing assumptions, and we made two changes in our pricing methodology. Changes made in this year's valuation were for the following items, which are described in detail in the July 1, 2011 valuation report.

- Update to the FY 2011 census;
- Update of the porting rates to more accurately reflect prior experience;
- Adjustment to the claim selection factors;
- Using a 30-year amortization period for fund gains and losses;
- Revision of the mortality rate timing; and
- Inclusion of the impact of optional benefit increase elections for porters.

This work product was prepared solely for VRS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## **Actuarial Methods and Assumptions**

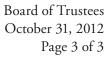
The methods and assumptions are those used in the July 1, 2011 actuarial valuation of the self-funded long-term care benefit that is part of the VSDP program. The methods and assumptions used herein comply with the parameters specified by GASB Statement No. 43 and 45.

#### Limitations

In preparing this report, we relied, without audit, on information provided by VRS. This information includes, but is not limited to, benefit provisions, benefit payments, employee data and financial information. In our examination of these data, we found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data are incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions used in this valuation. It is certain that actual experience will not conform exactly to the assumptions used in this valuation. Actual liability amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or





decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

Milliman's work product was prepared exclusively for VRS for a specific and limited purpose. It is a complex technical analysis that assumes a high level of knowledge concerning the plan's operations, and uses data which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any distribution of this report must be provided in its entirety unless prior written consent is obtained from Milliman.

# Valuation Results and Supplemental Information

The following schedules (or updates to them) were prepared by VRS from information prepared by us during the 2011 actuarial valuation or from supplemental information prepared by us for use in the System's Comprehensive Annual Financial Report. We have reviewed them for inclusion in the 2012 Comprehensive Annual Financial Report:

- Schedule of Funding Progress
- · Schedule of Actuarial Methods and Significant Assumptions
- Schedule of Employer Contributions
- Schedules of Selected Experience Rates

#### Certification

On the basis of the foregoing, I certify that, to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with Actuarial Standards of Practice, the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. I am a member of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Best regards,

Jonathan L. Shreve, FSA, MAAA

Jonathan L. Shreve

Consulting Actuary

# Actuary's Certification Letter — OPEB Plans-Line of Duty Act Fund



October 31, 2012

## **Board of Trustees**

Virginia Retirement System 1200 E. Main Street Richmond, VA 23219

Dear Trustees:

Government Account Standards Board Statements No. 43 and 45 require the actuarial valuations of retiree medical and other post-employment benefit (OPEB) plans. Cavanaugh Macdonald Consulting, LLC (CMC) is submitting the results of the annual actuarial valuation of the Virginia Retirement System (VRS) Line of Duty Act Fund (the Plan) prepared as of June 30, 2011.

CMC has relied on the plan provisions and eligibility provisions provided by the Commonwealth of Virginia's Line of Duty Act Program (LODA Program) provided by §9.1-400 of the Code of Virginia (the Code), the 2010 Appropriations Act and the 2011 Appropriations Act (the Acts). Additionally, CMC has received active participant data from the Virginia Retirement System (VRS) and inactive data provided by the Commonwealth of Virginia's Department of Accounts (DOA). CMC has reviewed the data for reasonableness only, and has not performed a formal audit of the data used for this valuation. Because the census data was collected from a wide range of sources with varying and, at times, limited content, the data is incomplete. Adjustments have been made to account for this incompleteness. Along with the valuation results, commentary is provided regarding the various aspects of developing the cost structure for LODA Program benefits to be financed through the Plan.

The results are provided for two individual segments of the total covered population: state employees and political subdivision employees. State employees include state employees, Virginia law officers (VaLORS), state police (SPORS), Department of Motor Vehicles (DMV) employees and members of the National Guard. Political subdivision employees include Emergency Medical Technicians (EMTs), Fire-EMT personnel and employees performing hazardous duties in political subdivisions within VRS, as well five independent retirement systems. The results of each segment are based upon



unique demographic characteristics and cost basis of each individual segment. Valuation results also are shown as an Aggregated Total, which provides results assuming a blended, single group cost basis. In using a single group cost basis, the results provided for the Aggregated Total will not equal the sum of the two individual segments.

Projections estimate annual Full-Time Equivalent (FTE) employee contributions for the fiscal year 2013 to be \$285.79 for state employees; \$592.71 for political subdivision employees; and \$474.14 for the Aggregated Total. The contribution rates assume plan participation of 12,400.4 state FTE employees; 19,837.75 political subdivision FTE employees; and 32,238.15 FTE employees for the Aggregated Total. The contribution rates represent, in total, the estimated cost of providing benefits payable in each fiscal year; administrative expenses; the cost of benefits incurred and reported to the administrator but awaiting processing; and the loan installment to repay the LODA Program's costs financed via loans from the Group Life Insurance Program. As currently participating political subdivision employer groups may elect to opt-out of the plan and elect to self-fund benefits paid under the LODA Program, effective July 1, 2012 the estimates assume those employer groups without claims incurred prior to July 1, 2011 will opt-out after June 30, 2012. A reduction in the plan's participation level below 32,238.15 FTE employees may result in higher per FTE employee allocations for the plan's fixed costs (e.g., expenses and payments to current beneficiaries, and loan payments). Details and assumptions of the projected estimates are provided in Schedule F.

The results provided do not account for the potential, long-term incurred but not reported claims resulting from a lack of employer or beneficiary education about the Plan's benefits. The potential cost and liability for these claims may be considerable. A margin for these costs may need to be considered. Additionally, the State Comptroller may want to consider this potential risk in regards to its authority to waive the five-year statute of limitation on claims.

The promised death benefits and post-employment health care benefits provided through the plan are included in all of the actuarially estimated contribution rates. If the Plan is established as a cost-sharing, multiple-employer plan, the liability for the Plan is developed and reported, as a whole, under the requirements of GASB Statement No. 43. The measurement of the cost-sharing employers' OPEB expense and liabilities under GASB Statement No. 45 is based upon the employers' contractually required contributions to the Plan. The actuarially estimated contribution rates based upon the requirements of GASB 43 were developed using the projected unit credit cost method with projected benefits. As the Acts require contributions to be determined on a current disbursement basis, the Plan has no assets in trust solely to provide benefits, and GASB 43 requires that the discount rate used to value a plan be based on the likely return of the assets held in trust to pay benefits, the GASB 43 valuation estimates provided in this report reflect a discount rate of 4.75%. The assumed annual rate of return of 4.75% is assumed to be consistent with the long-term rate of Virginia's Local Government Investment pool (LGOP). The unfunded accrued liability is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period on the assumption that payroll will increase by 3.00% annually. The assumptions recommended by the actuary are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan, and meet the parameters for disclosures under GASB 43 and 45.



The following schedules (or updates to them) were prepared by VRS from information prepared by us during the 2011 actuarial valuation or from supplemental information prepared by us for use in the System's Comprehensive Annual Financial Report. We have reviewed them for inclusion in the 2012 Comprehensive Annual Financial Report:

- Schedule of Funding Progress
- Schedule of Actuarial Methods and Significant Assumptions
- Schedule of Employer Contributions
- Schedules of Selected Experience Rates

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 Plan and on actuarial assumptions that are internally consistent and reasonably based on the actuarial experience of the VRS. The aggregate assumptions recommended by the actuary are reasonably related to the experience under the Plan and are reasonable expectations of anticipated experience under the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: potential variance in the number and/or type of covered lives; the number and type of employer groups electing to participate in the Plan; Plan experience 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 Plan's funded status); and changes in Plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Respectfully submitted,

Eric H. Gary, FSA, FCA, MAAA

Senior Actuary

he Actuarial Section for VRS-administered Other Post-Employment Benefit (OPEB) Plans presents information about the assumptions adopted by the Board of Trustees and used by the VRS actuaries to evaluate the funded status of these plans. This information includes assumptions about retirements, disabilities, terminations and salary increase rates. The section also provides a summary of OPEB plan provisions and changes.

# Summary of Actuarial Assumptions and Methods

At its meeting on June 17, 2010, the Board reduced the assumption for the investment rate of return from 7.50% to 7.00%. The following assumptions include the Group Life Insurance Program, the Retiree Health Insurance Credit Program, the Virginia Sickness and Disability Program and the Line of Duty Act Program. They were based on an analysis of VRS pension plan experience for the four-year period July 1, 2004 through June 30, 2008 and, along with the subsequent change in the assumption for the investment rate of return, were used for the June 30, 2010 and subsequent actuarial valuations.

# ACTUARIAL ASSUMPTIONS AND METHODS - OTHER POST-EMPLOYMENT BENEFIT (OPEB) PLANS

FOR THE JUNE 30, 2011 ACTUARIAL VALUATION

Actuarial Assumptions and Methods	Group Life Insurance Program	Retiree Health Insurance Credit Program	Virginia Sickness and Disability Program	Line of Duty Act Program
Valuation Interest Rate	7.00%	7.00%	7.00%	4.75%
Salary Scale Inflation Factor	2.50%	2.50%	2.50%	2.50%
Actuarial Cost Method	Entry Age Normal	<b>Entry Age Normal</b>	Projected Unit Credit	Projected Unit Credit
Funding Period	30 Years	30 Years	30 Years	30 Years
Payroll Growth Rate	3.00%	3.00%	3.00%	3.00%
Assets Valuation Method – State and Teacher	5-Year Smoothed Market	5-Year Smoothed Market	Market Value	Market Value
Assets Valuation Method – Political Subdivisions	5-Year Smoothed Market	Market Value	N/A	Market Value

## FIGURE 4.7 - RETIREMENT RATES-OPEB PLANS

Sample rates of retirement for members eligible to retire are shown below.

## State Employees

	Plan 1					Pla	n 2	
		vith Less Than of Service		nt with 30 or rs of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	3.00%	3.22%	10.00%	10.00%	0.00%	0.00%	10.00%	10.00%
55	5.00%	5.00%	10.00%	10.00%	0.00%	0.00%	10.00%	10.00%
59	5.00%	5.50%	10.00%	10.00%	0.00%	0.00%	10.00%	10.00%
60	5.00%	5.50%	10.00%	15.00%	5.00%	5.50%	10.00%	15.00%
61	10.00%	10.00%	15.00%	20.00%	10.00%	10.00%	15.00%	20.00%
62	15.00%	15.00%	25.00%	30.00%	15.00%	15.00%	25.00%	30.00%
64	15.00%	15.00%	20.00%	20.00%	15.00%	15.00%	20.00%	20.00%
65	40.00%	40.00%	30.00%	40.00%	40.00%	40.00%	30.00%	40.00%
67	40.00%	40.00%	25.00%	25.00%	40.00%	40.00%	25.00%	25.00%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

FIGURE 4.7 - RETIREMENT RATES-OPEB PLANS, cont.

# **Teachers**

	Plan 1					Pla	n 2	
		vith Less Than of Service		nt with 30 or rs of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	2.00%	2.00%	17.50%	15.00%	0.00%	0.00%	17.50%	15.00%
55	5.70%	6.10%	22.50%	22.50%	0.00%	0.00%	22.50%	22.50%
59	7.00%	7.50%	22.50%	22.50%	0.00%	0.00%	22.50%	22.50%
60	7.50%	8.50%	22.50%	22.50%	7.50%	8.50%	22.50%	22.50%
61	11.00%	12.00%	30.00%	30.00%	11.00%	12.00%	30.00%	30.00%
62	17.00%	17.00%	35.00%	40.00%	17.00%	17.00%	35.00%	40.00%
64	18.00%	16.50%	30.00%	25.00%	18.00%	16.50%	30.00%	25.00%
65	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
67	40.00%	40.00%	20.00%	30.00%	40.00%	40.00%	20.00%	30.00%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

	Plan 1					Pla	n 2	
		vith Less Than of Service		t with 30 or s of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	3.50%	3.50%	13.00%	15.60%	0.00%	0.00%	13.00%	15.60%
55	5.00%	5.00%	11.50%	14.30%	0.00%	0.00%	11.50%	14.30%
59	4.50%	6.00%	13.50%	13.40%	0.00%	0.00%	13.50%	13.40%
60	6.00%	7.50%	17.00%	12.80%	6.00%	7.50%	17.00%	12.80%
61	10.50%	10.00%	19.00%	17.70%	10.50%	10.00%	19.00%	17.70%
62	17.50%	15.50%	31.00%	28.00%	17.50%	15.50%	31.00%	28.00%
64	16.50%	17.00%	29.00%	18.30%	16.50%	17.00%	29.00%	18.30%
65	40.00%	40.00%	41.00%	29.60%	40.00%	40.00%	41.00%	29.60%
67	40.00%	40.00%	24.00%	33.20%	40.00%	40.00%	24.00%	33.20%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits - All Other Employers

	Plan 1					Pla	n 2	
		vith Less Than of Service		t with 30 or s of Service		vith Less Than of Service		t with 30 or s of Service
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	5.00%	4.00%	9.00%	8.00%	0.00%	0.00%	9.00%	8.00%
55	5.00%	5.50%	14.00%	11.50%	0.00%	0.00%	14.00%	11.50%
59	6.00%	5.00%	11.00%	11.50%	0.00%	0.00%	11.00%	11.50%
60	6.00%	7.50%	11.00%	13.00%	6.00%	7.50%	11.00%	13.00%
61	10.00%	7.50%	25.00%	17.50%	10.00%	7.50%	25.00%	17.50%
62	17.00%	17.00%	35.00%	25.00%	17.00%	17.00%	35.00%	25.00%
64	15.00%	13.00%	27.00%	17.50%	15.00%	13.00%	25.00%	25.00%
65	40.00%	40.00%	33.00%	40.00%	40.00%	40.00%	25.00%	25.00%
67	40.00%	40.00%	20.00%	25.00%	40.00%	40.00%	33.00%	40.00%
>= 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

FIGURE 4.7 - RETIREMENT RATES-OPEB PLANS, cont.

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

Age	Reduced Retirement	Unreduced Retirement
50	9.00%	25.00%
55	8.50%	18.00%
59	13.50%	31.50%
60	20.00%	35.00%
> = 65	100.00%	100.00%

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – All Other Employers

Age	Reduced Retirement	Unreduced Retirement	
50	8.50%	25.00%	_
55	8.50%	17.50%	
59	11.50%	28.50%	
60	20.00%	35.00%	
> = 65	100.00%	100.00%	

# State Police Officers

Age	Reduced Retirement	Unreduced Retirement	
50	10.00%	15.00%	
55	10.00%	15.00%	
59	12.00%	20.00%	
60	25.00%	40.00%	
> = 64	100.00%	100.00%	

# Virginia Law Officers

Age	Reduced Retirement	Unreduced Retirement	
50	9.20%	25.00%	
55	9.50%	20.00%	
59	12.00%	25.00%	
60	20.00%	40.00%	
> = 65	100.00%	100.00%	

# Judges

Juuges	Se	rvice Multiplier Years of Servic	Service Multiplier = 3.5 Years of Service			
Age	2-11	12	>=13	1-8	9	>=10
60	0.00%	50.00%	50.00%	0.00%	50.00%	50.00%
65	50.00%	50.00%	15.00%	50.00%	50.00%	15.00%
69	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
> = 70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

# FIGURE 4.8 - DISABILITY RATES-OPEB PLANS

As shown below for selected ages.

# State Employees

14% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.1000%	0.0100%	
30	0.2000%	0.1500%	
40	0.2000%	0.2900%	
50	0.5000%	0.5500%	
60	0.8000%	1.0000%	

# **Teachers**

5% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0000%	0.0000%	
30	0.0200%	0.0200%	
40	0.0300%	0.0600%	
50	0.2000%	0.1500%	
60	0.4700%	0.4000%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

14% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0000%	0.0000%	
30	0.1000%	0.1000%	
40	0.3000%	0.1000%	
50	0.4000%	0.4000%	
60	1.2000%	1.0000%	

# $Political\ Subdivision\ Employees\ Not\ Receiving\ Enhanced\ Hazardous\ Duty\ Benefits-All\ Other\ Employees$

14% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0300%	0.0100%	
30	0.1000%	0.0400%	
40	0.2400%	0.1300%	
50	0.5200%	0.4500%	
60	1.3600%	1.1600%	

# FIGURE 4.8 - DISABILITY RATES-OPEB PLANS, cont.

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

60% of disability cases are assumed to be service-related.

Age	Rate	
20	0.0000%	
30	0.0500%	
40	0.2400%	
50	0.5300%	
60	0.8100%	

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits - All Other Employers

60% of disability cases are assumed to be service-related.

Age	Rate
20	0.0000%
30	0.0400%
40	0.1500%
50	0.5100%
60	0.8500%

# State Police Officers

60% of disability cases are assumed to be service-related.

Age	Rate	
20	0.0000%	
30	0.0300%	
40	0.2100%	
50	0.6800%	)
60	0.0000%	

# Virginia Law Officers

60% of disability cases are assumed to be service-related.

Age	Rate	
20	0.0000%	
30	0.0300%	
40	0.1800%	
50	0.4700%	
60	0.6200%	

# FIGURE 4.8 - DISABILITY RATES-OPEB PLANS, cont.

# Judges

5% of disability cases are assumed to be service-related.

Age	Male	Female	
20	0.0000%	0.0000%	
30	0.0100%	0.0100%	
40	0.1400%	0.0900%	
50	0.4800%	0.4000%	
60	0.0000%	0.0000%	

# FIGURE 4.9 – TERMINATION RATES-OPEB PLANS

Withdrawal rates are based on age and years of service credit. Sample rates for selected ages and years of service are shown below for causes other than death, disability or retirement.

# State Employees- Plan 1

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	s of Service Credit –	Males	Years	of Service Credit — F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	22.00%	13.00%	0.00%	25.50%	16.00%	0.00%
35	17.00%	9.50%	4.50%	19.00%	11.50%	5.00%
45	14.00%	7.50%	2.30%	14.00%	7.50%	2.50%
55	10.00%	5.50%	0.00%	12.00%	6.00%	0.00%
65	12.00%	13.00%	0.00%	13.00%	17.00%	0.00%

# State Employees- Plan 2

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	s of Service Credit –	Males	Years	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	22.00%	13.00%	0.00%	25.50%	16.00%	0.00%
35	17.00%	9.50%	4.50%	19.00%	11.50%	5.00%
45	14.00%	7.50%	2.30%	14.00%	7.50%	2.50%
55	10.00%	5.50%	0.40%	12.00%	6.00%	0.40%
65	12.00%	13.00%	0.00%	13.00%	17.00%	0.00%

# Teachers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

Years of Service Cre			- Males Years of Service Credit - Females			Females
Age 0-2	3-9	10+	0-2	3-9	10+	
25	15.00%	13.00%	0.80%	14.00%	12.50%	15.00%
35	14.00%	7.00%	3.20%	15.00%	9.70%	4.00%
45	15.00%	8.00%	1.90%	11.50%	6.30%	2.00%
55	14.00%	7.00%	0.00%	12.50%	5.70%	0.00%
65	17.00%	8.25%	0.00%	13.00%	8.00%	0.00%

# FIGURE 4.9 - TERMINATION RATES-OPEB PLANS, cont.

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years of Service Credit – Males			Years of Service Credit – Females			
Age	0-2	3-9	10+	0-2	3-9	10+	
25	21.80%	13.70%	0.00%	23.30%	16.70%	0.00%	
35	17.20%	9.70%	5.80%	18.60%	10.60%	5.10%	
45	14.30%	7.10%	2.90%	14.80%	7.70%	2.80%	
55	10.90%	5.30%	0.70%	11.90%	6.30%	0.00%	
65	13.60%	8.20%	0.00%	12.60%	8.20%	0.00%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – All Other Employers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	of Service Credit –	Males	Years	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	23.50%	14.00%	0.00%	25.50%	16.50%	0.00%
35	18.50%	10.50%	5.50%	19.00%	11.50%	6.00%
45	15.50%	8.00%	3.00%	15.00%	8.00%	3.50%
55	12.00%	6.50%	1.00%	12.50%	6.50%	0.00%
65	12.00%	8.00%	0.00%	13.00%	9.00%	0.00%

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	of Service Credit –	Males	Years o	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	7.80%	6.80%	0.00%	7.80%	6.80%	0.00%
35	8.00%	4.40%	2.40%	8.00%	4.40%	2.40%
45	9.20%	4.60%	1.50%	9.20%	4.60%	1.50%
55	8.30%	6.30%	0.00%	8.30%	6.30%	0.00%
60	8.70%	6.50%	0.00%	8.70%	6.50%	0.00%

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – All Other Employers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	of Service Credit –	Males	Years o	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	10.70%	8.30%	0.00%	10.70%	8.30%	0.00%
35	10.90%	6.30%	3.30%	10.90%	6.30%	3.30%
45	8.70%	5.20%	1.80%	8.70%	5.20%	1.80%
55	10.90%	6.30%	0.50%	10.90%	6.30%	0.50%
60	8.20%	7.70%	0.50%	8.20%	7.70%	0.50%

# FIGURE 4.9 - TERMINATION RATES-OPEB PLANS, cont.

# State Police Officers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	of Service Credit –	Males	Years	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	7.50%	5.50%	3.00%	14.15%	8.85%	4.38%
35	7.50%	4.80%	2.40%	14.50%	7.29%	6.08%
45	10.00%	4.50%	1.40%	11.73%	7.92%	5.91%
55	10.00%	6.71%	1.20%	6.08%	10.64%	4.11%
65	10.00%	7.47%	1.20%	0.51%	15.42%	0.62%

# Virginia Law Officers

# SEPARATIONS FROM ACTIVE SERVICE DUE TO TERMINATION

	Years	s of Service Credit –	Males	Years	of Service Credit – F	emales
Age	0-2	3-9	10+	0-2	3-9	10+
25	20.00%	15.00%	5.00%	20.00%	15.00%	7.50%
35	20.00%	12.50%	5.00%	20.00%	12.50%	7.50%
45	15.00%	10.50%	4.00%	17.50%	8.00%	5.90%
55	12.00%	6.50%	4.00%	10.00%	12.00%	6.00%
65	15.00%	7.00%	4.00%	10.00%	10.00%	6.00%

# **Judges**

There are no assumed rates of withdrawal prior to service retirement for causes other than death, disability or retirement.

# FIGURE 4.10 - SALARY INCREASE RATES-OPEB PLANS

Sample salary increase rates are shown below. These factors are not applicable to the Line of Duty Act Program since neither the benefit nor the cost is salary based.

# State Employees

Inflation of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown. It is assumed state employees covered under the Virginia Sickness and Disability Program (VSDP) receive a 3.75% annual increase in pay while disabled. This adjusted pay is used to determine deferred retirement benefits payable from the System.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.85%	5.60%	
3	1.25%	5.00%	
6	0.95%	4.70%	
9	0.50%	4.25%	
11	0.15%	3.90%	
15	0.15%	3.90%	
19	0.15%	3.90%	
20 or more	0.00%	3.75%	

# FIGURE 4.10 - SALARY INCREASE RATES-OPEB PLANS, cont.

## **Teachers**

Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	2.45%	6.20%	
3	2.35%	6.10%	
6	1.95%	5.70%	
9	1.85%	5.60%	
11	1.35%	5.10%	
15	1.15%	4.90%	
19	0.95%	4.70%	
20 or more	0.00%	3.75%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.85%	5.60%	
3	1.25%	5.00%	
6	0.95%	4.70%	
9	0.50%	4.25%	
11	0.15%	3.90%	
15	0.15%	3.90%	
19	0.15%	3.90%	
20 or more	0.00%	3.75%	

# Political Subdivision Employees Not Receiving Enhanced Hazardous Duty Benefits – All Other Employers

Inflation rate of 2.50% plus productivity component of 1.25% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.85%	5.60%	
3	1.25%	5.00%	
6	0.95%	4.70%	
9	0.50%	4.25%	
11	0.15%	3.90%	
15	0.15%	3.90%	
19	0.15%	3.90%	
20 or more	0.00%	3.75%	

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – 10 Largest Employers

Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

# FIGURE 4.10 - SALARY INCREASE RATES-OPEB PLANS, cont.

# Political Subdivision Employees Receiving Enhanced Hazardous Duty Benefits – All Other Employers

Inflation rate of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

# State Police Officers

Inflation of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown. It is assumed state police who are covered under the Virginia Sickness and Disability Program (VSDP) receive a 3.50% annual increase in pay while disabled. This adjusted pay is used to determine deferred retirement benefits payable from the System.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

# Virginia Law Officers

Inflation of 2.50% plus productivity component of 1.00% plus step-rate/promotional component as shown. It is assumed Virginia law officers who are covered under the Virginia Sickness and Disability Program (VSDP) receive a 3.50% annual increase in pay while disabled. This adjusted pay is used to determine deferred retirement benefits payable from the System.

Years of Service Credit	Annual Step-Rate/Promotional Rates of Increase	Total Annual Rate of Increase	
1	1.25%	4.75%	
3	1.25%	4.75%	
6	0.90%	4.40%	
9	0.90%	4.40%	
11	0.50%	4.00%	
15	0.50%	4.00%	
19	0.50%	4.00%	
20 or more	0.00%	3.50%	

# **Judges**

Salary increase rates are 4.50%.

# FIGURE 4.11 - EMPLOYMENT TERMINATION RATES - LONG-TERM CARE (SELECTED VALUES ONLY)

The termination rates used for the long-term care plan valuation differ from those used for other valuations, particularly at the older ages. For example, whereas other valuations assume a 100% retirement rate by age 70 for all categories of employees, this is not the case for long-term care, which is typically accessed at older ages. Since termination rates are a critical and sensitive set of assumptions for the valuation of the long-term care benefit, a more detailed age by employment duration grid of termination rates appropriate for this purpose was developed.

# Current Assumption: Selected Employment Turnover Assumptions by Hire Age and Accrued Service

Employment Duration (Ye	ars) - Female
-------------------------	---------------

Hire Age	0	10	20	30	40
20	0.420	0.117	0.005	0.021	0.090
30	0.239	0.055	0.019	0.085	0.201
40	0.230	0.040	0.042	0.224	0.303
50	0.191	0.056	0.179	0.407	0.686
60	0.200	0.142	0.254	0.514	0.872
70	0.492	0.259	0.604	1.000	1.000

# Employment Duration (Years) - Male

Hire Age	0	10	20	30	40
20	0.336	0.069	0.035	0.011	0.100
30	0.284	0.050	0.027	0.097	0.217
40	0.221	0.040	0.048	0.194	0.237
50	0.188	0.048	0.219	0.349	0.478
60	0.199	0.136	0.159	0.690	0.966
70	0.250	0.209	0.792	1.000	1.000

#### FIGURE 4.12 - PORTING RATES - LONG-TERM CARE (SELECTED VALUES ONLY)

Porting rates represent the probability that an individual will choose to port the coverage upon employment termination. Porting rates are assumed to increase with longevity because the contributions for terminated employees are based upon the age at which they started the program (either 2002 or age at hire, if later).

# Current Selected Policy Porting Rate Assumptions by Policy Issue Age and Policy Duration

# Policy Duration (Years)

Issue Age	0	10	20	30	40
30	0.0000	0.0272	0.1185	0.3537	0.6574
40	0.0000	0.0679	0.2423	0.4526	0.8230
50	0.0091	0.1352	0.3116	0.5790	0.9589
60	0.0376	0.1791	0.3986	0.7407	0.9997
70	0.0902	0.2447	0.5099	0.8985	1.0000
80	0.1441	0.3191	0.6524	0.9987	1.0000
90	0.1618	0.3750	0.8347	1.0000	1.0000
110	0.2040	0.5182	1.0000	1.0000	1.0000

# ADDITIONAL INFORMATION ABOUT ACTUARIAL ASSUMPTIONS AND METHODS – OTHER POST-EMPLOYMENT BENEFIT (OPEB) PLANS

# Mortality Rates:

- Pre-Retirement: 1994 Group Annuity Mortality
  Table for males and females with a one-year set
  back in age for males and females in all employer
  groups.
- Post-Retirement: 1994 Group Annuity Mortality Table for males and females with a one-year set back in age for male and female state employees and employees of political subdivisions not receiving enhanced hazardous duty benefits; a three-year set back in age for male and female teachers; and a one-year set back in age for male and female judges. 1994 Group Annuity Mortality Table for males and females with a four-year set back in age for state police officers, political subdivision employees in hazardous duty positions receiving enhanced benefits and other Virginia law enforcement and correctional officers.
- Post-Disablement: 70% of PBGC Disabled Mortality Table 5a for males; 90% of PBGC Disabled Mortality Table 6a for females.

Provision for Expense. The assumed investment return represents the anticipated net rate of return after payment of all administrative expenses.

Asset Valuation Method. For the Group Life Insurance Program and the state and teacher employer groups for the Retiree Health Insurance Credit Program, the actuarial value of assets is equal to the market value of assets, less a five-year phase-in of the excess or shortfall between expected investment returns and actual income, both based on market value, with the resulting value not being less than 80% or more than 120% of the market value of assets. For VSDP, the Line of Duty Act Program and the political subdivision employer groups in the Retiree Health Insurance Credit Program, the actuarial value of assets is equal to the market value of assets.

Actuarial Cost Method. For the Group Life Insurance and Retiree Health Insurance Credit Programs, the normal contribution is determined using the entry age normal method. Under this method, a calculation is made for the cost of benefits to determine the uniform and constant percentage rate of the employer contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would meet the cost of all benefits payable on his or her behalf. 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 the expected benefits to be paid. The accrued liability contribution amortizes the balance of the unfunded accrued actuarial liability (UAAL) over a period of years from the valuation date.

For VSDP and the Line of Duty Act Program, the normal contribution is determined using the projected unit credit method. Under this method, the liability for active employees is the portion of the employee's present value of expected benefits attributed to service completed as compared to total service at decrement. The unfunded accrued liability is determined by subtracting the current assets from the liability of active employees and current beneficiaries. The accrued liability contribution amortizes the balance of the unfunded accrued actuarial liability (UAAL) over a period of years from the valuation date.

Actuarial Gains and Losses. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability and are amortized as part of that balance.

Payroll Growth Rates. The payroll growth rate is assumed to be 3.00% based on a zero population growth assumption.

Funding Period. For all members, the funding period is 30-year open amortization, computed as a level percent of covered payroll.

# Summary of Other Post-Employment **Benefit Plan Provisions**

# **Group Life Insurance Program**

#### **ADMINISTRATION**

The plan is administered by the Board of Trustees of the Virginia Retirement System (the System). Contributions received are held in trust. Payments are made to the Minnesota Life Insurance Company as reimbursement for the payment of life insurance proceeds to the beneficiaries.

An addition to the contribution requirement for the active member benefit provides for the retiree death benefit. The active portion of the contribution is used to purchase group term life insurance from an insurance company; the retired member portion is held in a trust until required for benefit payments. When a covered retiree dies, the Minnesota Life Insurance Company pays the insurance claim and then collects a premium equal to the cost of the claim.

The retired member contribution is determined actuarially. The Board sets administrative policy and determines the allocation of the assets held for investment.

# **ELIGIBILITY**

The following employees are covered under the Group Life Insurance Program upon employment:

- Full-time permanent, salaried employees of the Commonwealth of Virginia, including state employees, faculty members of the state's public colleges and universities, state police officers (SPORS), Virginia law officers (VaLORS) and judicial employees (JRS);
- Full-time permanent, salaried teachers and other administrative employees of local public school divisions;

- Full-time permanent, salaried sheriffs, deputy sheriffs and other eligible non-hazardous duty and hazardous duty employees of political subdivisions that have elected to participate in the Group Life Insurance Program; and
- Employees of five localities that do not participate in VRS for retirement: City of Richmond, City of Portsmouth, City of Roanoke, City of Norfolk and Roanoke City School Board.

Certain members who were employed at the time of initial coverage under the Group Life Insurance Program had the option to decline coverage.

# **ACTIVE MEMBER BENEFIT**

Active members are covered for the following benefits:

- Natural death benefit equal to the member's compensation rounded to the next highest thousand and then doubled
- Accidental death benefit, which is double the natural death benefit
- Accidental dismemberment benefit, safety belt benefit, repatriation benefit, felonious assault benefit and an accelerated death benefit option

Covered employees may elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program. Optional group life benefits are not included in the valuations of the OPEB plans.

## RETIREE BENEFIT

- 1. Service Retirement. A death benefit equal to the active member's natural death benefit and the accelerated death benefit option continue for retirees and for deferred members who have met the eligibility requirements for retirement upon leaving employment. Coverage begins to reduce by 25% on the January 1 following one calendar year of retirement and by 25% each January 1 thereafter, until it reaches 25% of its original value.
- 2. Disability Retirement. The benefits available to disability retirees are the same as those for service retirees, except that the first 25% annual reduction begins on the January 1 following one calendar year from the retiree's 65th birthday or his or her retirement date, whichever is later.

# Retiree Health Insurance Credit Program

## **ADMINISTRATION**

The plan is administered by the System's Board of Trustees. Contributions received are held in trust. The Board sets administrative policy and determines the allocation of the assets held for investment.

# **ELIGIBILITY**

The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against the portion of qualified health insurance premiums retirees pay for single coverage. The credit cannot exceed the amount of the premium and ends upon the retiree's death.

If a member has worked for more than one employer under VRS, SPORS, VaLORS or JRS, for the purpose of this valuation, the most current (or last) employer assumes the full liability for that employee.

#### CREDIT AMOUNTS

The dollar amounts vary depending on the employee type, as shown in the following table:

## **Health Insurance Credit Dollar Amounts at Retirement**

ELIGIBLE EMPLOYEES	Amount per Year of Service	Maximum Credit per Month
State employees	\$ 4.00	No Cap
Teachers and other administrative school employees	\$ 4.00	No Cap
General registrars and their employees constitutional officers and their employees and local social service employees	, \$ 1.50	\$45.00
General registrars and their employees constitutional officers and their employees and local social service employees, if the political subdivision elects the \$1.00 enhancement	, \$ 2.50	\$75.00
Other political subdivision employees as elected by the employer	\$ 1.50	\$45.00

# Virginia Sickness and Disability Program (VSDP)

## **ADMINISTRATION**

The plan is administered by the System's Board of Trustees. Contributions received are held in trust. The Board sets administrative policy and determines the allocation of the assets held for investment.

## **ELIGIBILITY**

The following state employees are covered automatically under the Virginia Sickness and Disability Program (VSDP) upon employment:

 Full-time permanent, salaried employees of the Commonwealth of Virginia (VRS) and part-time permanent, salaried state employees who work at least 20 hours a week;

- Public college and university faculty members who elect to participate in VRS instead of an optional retirement plan. These faculty members can elect VSDP or a disability plan offered by their institution;
- Full-time permanent, salaried state police officers (SPORS); and
- Full-time permanent, salaried Virginia law officers other than state police (VaLORS).

State employees hired before January 1, 1999 had the option to elect VSDP or retain their eligibility to be considered for disability retirement.

# SHORT-TERM AND LONG-TERM **DISABILITY BENEFITS**

VSDP coverage provides short-term and long-term disability benefits for non-work related and workrelated illnesses and injuries. Eligible members who become disabled receive short-term disability benefits for up to 125 workdays, following a seven-calendar day waiting period from the first day of disability. Members who are still disabled after 125 workdays are evaluated for long-term disability. Members hired or rehired on or after July 1, 2009 must satisfy eligibility periods for non-work related disability coverage and certain income replacement levels.

The long-term disability benefit provides income replacement equal to 60% of the member's predisability income. While members are on long-term disability, they are not considered employees of the Commonwealth of Virginia. Members who can work at least 20 hours a week but cannot perform their full duties may be eligible for long-term disability benefits while working. They must have returned to work with modified duties while on short-term disability.

The long-term disability benefit is adjusted by any salary, wages, workers' compensation benefits or other disability payments the member receives for the same condition. If a member's condition becomes catastrophic, income replacement will increase to 80% of pre-disability income for as long as the condition is considered catastrophic. A disability is determined to be catastrophic if a member is unable to perform at least two of a specified list of activities of daily living without assistance.

Long-term disability benefits end if the member can perform the full duties of his or her pre-disability position without any restrictions during the first 24 months of disability; can perform the regular duties of any job for which the member is reasonably qualified after 24 months of disability and earning 80% or more of his or her pre-disability income; takes a refund of his or her member contributions and interest; does not cooperate or comply with the requirements of VSDP; or begins receiving a VRS service retirement benefit. Benefits also end in the event of the member's death.



## **VSDP LONG-TERM CARE PLAN**

VSDP plan members are eligible for no-cost long-term care coverage under the VSDP Long-Term Care Plan. The plan provides a two-year maximum coverage period with a maximum \$96-per-day daily benefit for nursing home care and other covered services. The benefit of many of the other services is less than the nursing home benefit, which means those needing these services will take longer to reach their lifetime maximum amount, resulting in longer coverage duration.

Benefits begin after 90 days from the date the member is certified by a licensed healthcare professional as eligible for benefits. The benefit schedule includes the possibility of an increase for inflation every five years in the amount of 5.00% compounded annually since the last inflation increase. Since such increases are not pre-funded, they are accompanied by a corresponding increase in contributions. Upon retirement or termination from employment, VSDP plan members may elect to continue their long-term care coverage by paying the premiums.

# Line of Duty Act Program

# **ADMINISTRATION**

The plan is administered by the System's Board of Trustees. Contributions received are held in trust. The Board sets administrative policy and determines the allocation of the assets held for investment.

# **ELIGIBILITY**

Members of SPORS and VaLORS as well as members of VRS who are eligible for enhanced hazardous duty coverage are covered under the Line of Duty Act. Paid employees and volunteers in hazardous duty positions in all VRS-participating and non-VRS participating localities also are covered under the act.

## **BENEFITS**

Coverage provides death and health insurance benefits, which are administered by the Virginia Department of Accounts (DOA). The System is responsible for managing the assets of the Line of Duty Act Fund.

# **Summary of OPEB Plan Changes**

The following changes have occurred to the OPEB plan provisions.

## 2009 VALUATION

No actuarially material changes are made to the plan provisions. There are two changes of note:

- 1. On April 16, 2009, the Board adopts the recommended economic and demographic assumptions proposed by the actuary as a result of the June 2008 actuarial experience study.
- 2. For the June 30, 2009 valuation, the Board suspends application of the 80% to 120% market value-of-assets corridor on the actuarial value of assets for the Group Life Insurance Program and the Retiree Health Insurance Credit Program.

## 2010 VALUATION

No actuarially material changes are made to the plan provisions. There are two changes of note:

- 1. For the June 30, 2010 valuation, the application of the 80% to 120% market value-of-assets corridor on the actuarial value of assets is reinstated.
- 2. The Board reduces the investment rate-of-return assumption for the Group Life Insurance Program, the Retiree Health Insurance Credit Program and the Virginia Sickness and Disability Program (VSDP) from 7.50% to 7.00%.

# 2011 VALUATION

No actuarially material changes are made to the plan provisions.

# statistical section

Pension Trust Funds:

Schedule of Retirement Contributions by System

Schedule of Pension Trust Fund Additions by Source

Schedule of Pension Trust Fund Deductions by Type

Schedule of Retirement Benefits by System

Schedule of Retirement Benefits by Type

Schedule of Refunds by Type

Schedule of Retirees and Beneficiaries by

Type of Retirement

Schedule of Retirees and Beneficiaries by Payout

**Option Selected** 

Schedule of Average Benefit Payments

Schedule of Funding Progress—VRS Pension Plans

Other Employee Benefit Trust Funds:

Schedule of Group Life Insurance Additions by Source

Schedule of Group Life Insurance Deductions by Type

Schedule of Retiree Health Insurance Credit Additions

by Source

Schedule of Retiree Health Insurance Credit Deductions

by Type

Schedule of Disability Insurance Trust Fund Additions

by Source

Schedule of Disability Insurance Trust Fund

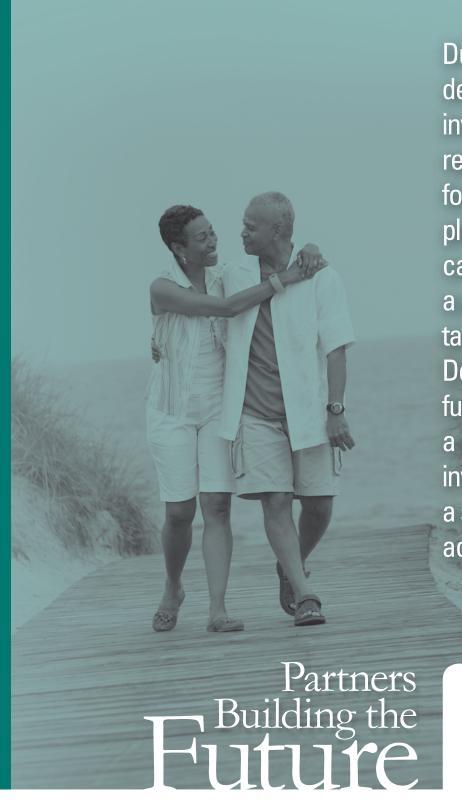
Deductions by Type

**VRS-Participating Employers** 

Commonwealth of Virginia 457 Deferred

Compensation and Cash Match Plans





During the fiscal year, VRS developed a new "path" investment structure to replace the tiered structure for the defined contribution plans. Plan participants can choose Do-It-For-Me, a pre-mixed portfolio of target date funds; Help-Me-Do-It, offering a menu of funds for those who want a more active role in their investments; or Do-It-Myself, a self-directed brokerage account for skilled investors.

The new investment path structure will help plan participants maximize their investment returns according to their comfort level with investing. It also sets the stage for most new members hired on or after January 1, 2014, who will be enrolled in a new hybrid plan that will require them to assume a greater investment role in securing their future retirement.

he Statistical Section presents detailed historical information regarding the pension and other employee benefit plans administered by the System. This information includes a 10-year analysis of changes in plan net assets, plan enrollment, contributions, plan additions and deductions, benefits and refunds. Included in this analysis is information regarding retirees and an analysis of funding, enrollment and investment activity related to the Commonwealth of Virginia 457 Deferred Compensation Plan and the Virginia Cash Match Plan.

The Statistical Section also lists the employers participating in VRS as of the end of the fiscal year.

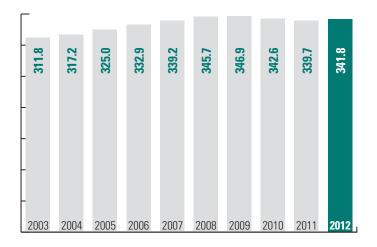
# **Pension Trust Funds**

FIGURE 5.1 - ANALYSIS OF CHANGES AND GROWTH IN PLAN NET ASSETS - ALL PENSION TRUST FUNDS

FOR THE YEARS ENDED JUNE 30									(EXPRESSED	IN MILLIONS)
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Net Assets Available– Beginning of Year	\$ 33,456	\$ 33,781	\$ 39,039	\$ 43,060	\$ 47,627	\$ 56,890	\$ 53,600	\$ 41,348	\$ 46,287	\$ 53,151
Funding:  Member and Employer  Contributions and										
Other Additions Benefits and Administrative	1,042	1,185	1,468	1,567	1,944	2,148	2,097	1,862	1,549	1,821
Expenses and Transfers	(1,687)	(1,865)	(2,049)	(2,214)	(2,434)	(2,665)	(2,857)	(3,157)	(3,397)	(3,518)
Net Funding	(645)	(680)	(581)	(647)	(490)	(517)	(760)	(1,295)	(1,848)	(1,697)
Investment Income: Interest, Dividends and										
Other Investment Income Net Appreciation (Depreciation		461	667	823	1,157	983	762	775	1,031	1,052
in Fair Value	401	5,477	3,935	4,391	8,596	(3,756)	(12,254)	5,459	7,681	(415)
Net Investment Income	970	5,938	4,602	5,214	9,753	(2,773)	(11,492)	6,234	8,712	637
Net Increase (Decrease)	325	5,258	4,021	4,567	9,263	(3,290)	(12,252)	4,939	6,864	(1,060)
Net Assets Available– End of Year	\$ 33,781	\$ 39,039	\$ 43,060	\$ 47,627	\$ 56,890	\$ 53,600	\$ 41,348	\$ 46,287	\$ 53,151	\$ 52,091

# FIGURE 5.2 - NUMBER OF ACTIVE MEMBERS





# FIGURE 5.3 – ANALYSIS OF CHANGES AND GROWTH IN PLAN NET ASSETS BY PENSION TRUST FUND

FOR THE YEARS ENDED JUNE 30

# VIRGINIA RETIREMENT SYSTEM PENSION TRUST FUND

(EXPRESSED IN MILLIONS)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Net Assets Available– Beginning of Year	\$ 32,448	\$ 32,727	\$ 37,784	\$ 41,640	\$ 46,021	\$ 54,948	\$ 51,743	\$ 39,890	\$ 44,646	\$ 51,280
Funding: Member and Employer Contributions and										
Other Additions Benefits and Administrative	965	1,097	1,366	1,459	1,834	2,022	1,979	1,765	1,482	1,740
Expenses and Transfers	(1,621)	(1,791)	(1,963)	(2,121)	(2,333)	(2,550)	(2,735)	(3,024)	(3,254)	(3,368)
Net Funding	(656)	(694)	(597)	(662)	(499)	(528)	(756)	(1,259)	(1,772)	(1,628)
Investment Income: Interest, Dividends and										
Other Investment Income Net Appreciation (Depreciation)	547	446	645	796	1,118	948	736	748	995	1,016
in Fair Value	388	5,305	3,808	4,247	8,308	(3,625)	(11,833)	5,267	7,411	(401)
Net Investment Income	935	5,751	4,453	5,043	9,426	(2,677)	(11,097)	6,015	8,406	615
Net Increase (Decrease)	279	5,057	3,856	4,381	8,927	(3,205)	(11,853)	4,756	6,634	(1,013)
Net Assets Available– End of Year	\$ 32,727	\$ 37,784	\$ 41,640	\$ 46,021	\$ 54,948	\$ 51,743	\$ 39,890	\$ 44,646	\$ 51,280	\$ 50,267

# STATE POLICE OFFICERS' RETIREMENT SYSTEM PENSION TRUST FUND

(EXPRESSED IN MILLIONS)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Net Assets Available– Beginning of Year	\$ 423	\$ 424	\$ 486	\$ 530	\$ 581	\$ 684	\$ 636	\$ 484	\$ 534	\$ 599
Funding: Member and Employer Contributions and										
Other Additions Benefits and Administrative Expenses and Transfers	13 (24)	15 (27)	19 (32)	20 (33)	21 (35)	26 (41)	25 (41)	21 (43)	13 (47)	16 (47)
Net Funding	 (11)	 (12)	 (13)	(13)	(14)	 (15)	 (16)	(22)	 (34)	 (31)
Investment Income:										
Interest, Dividends and Other Investment Income Net Appreciation (Depreciation)	7	6	9	10	14	12	9	9	12	12
in Fair Value	5	68	48	54	103	(45)	(145)	63	87	(5)
Net Investment Income	12	74	57	64	117	(33)	(136)	72	99	7
Net Increase (Decrease)	1	62	44	51	103	(48)	(152)	50	65	(24)
Net Assets Available– End of Year	\$ 424	\$ 486	\$ 530	\$ 581	\$ 684	\$ 636	\$ 484	\$ 534	\$ 599	\$ 575

# VIRGINIA LAW OFFICERS' RETIREMENT SYSTEM PENSION TRUST FUND (EXPRESSED IN MILLIONS)

	2003	2	2004	2005	2	2006	2	2007		2008		2009	2010	2011	2012
Net Assets Available– Beginning of Year	\$ 350	\$	395	\$ 498	\$	593	\$	700	\$	868	\$	853	\$ 691	\$ 792	\$ 911
Funding:  Member and Employer  Contributions and															
Other Additions Benefits and Administrative	51		56	66		69		64		74		69	56	35	42
Expenses and Transfers	(19)		(24)	(30)		(34) 35		(40) 24	_	(45) 29	_	(50) 19	 (58)	(64)	 (69) (27)
Net Funding Investment Income: Interest, Dividends and Other Investment Income	8		6	8		11		17		16		13	 12	18	18
Net Appreciation (Depreciation) in Fair Value	5		65	51		61		127		(60)		(193)	91	130	(7)
Net Investment Income	13		71	59		72		144		(44)		(181)	103	148	11
Net Increase (Decrease)	45		103	95		107		168		(15)		(162)	101	119	(16)
Net Assets Available– End of Year	\$ 395	\$	498	\$ 593	\$	700	\$	868	\$	853	\$	691	\$ 792	\$ 911	\$ 895

# JUDICIAL RETIREMENT SYSTEM PENSION TRUST FUND

(EXPRESSED IN MILLIONS)

		2003		2004		2005		2006		2007		2008		2009		2010		2011		2012
Net Assets Available– Beginning of Year	\$	234	\$	235	\$	271	\$	296	\$	326	\$	390	\$	367	\$	284	\$	315	\$	361
Funding:  Member and Employer  Contributions and																				
Other Additions	16		18		18		19		23		25		24		20		20	,	22	
Benefits and Administrative Expenses and Transfers Net Funding		(22) (6)		(23) (5)		(24) (6)		(24) (5)		(25) (2)		(29) (4)		(29) (5)		(31) (11)		(32) (12)		(34) (12)
Investment Income:																				
Interest, Dividends and Other Investment Income Net Appreciation (Depreciation)		4		3		4		5		8		7		5		5		7		7
in Fair Value		3		38		27		30		58		(26)		(83)		37		51		(2)
Net Investment Income		7		41		31		35		66		(19)		(78)		42		58		5
Net Increase (Decrease)		1		36		25		30		64		(23)		(83)		31		46		(7)
Net Assets Available-																				
End of Year	\$	235	\$	271	\$	296	\$	326	\$	390	\$	367	\$	284	\$	315	\$	361	\$	354

# SCHEDULE OF RETIREMENT CONTRIBUTIONS BY SYSTEM

FISCAL YEARS 2003-2012 (EXPRESSED IN THOUSANDS)

Vasu		V	irginia Retire	emer	nt System		State Police	Virginia Law	/	ldiaial	
Year Ended June 30	State		Teachers	S	Political Jubdivisions	Sub-Total	Officers' Retirement System	Officers' Retirement System		Judicial Retirement System	Total
2012***	\$ 307,843	\$	814,681	\$	613,572	\$ 1,736,096	\$ 16,611	\$ 42,202	\$	21,875	\$ 1,816,784
2011***	252,110		622,904		605,908	1,480,922	12,343	34,423		20,338	1,548,026
2010**	359,827		820,193		583,864	1,763,884	20,747	56,347		20,206	1,861,184
2009	416,921		986,116		575,951	1,978,988	25,280	69,071		24,064	2,097,403
2008	409,685		1,055,498		557,230	2,022,413	26,218	74,039		25,498	2,148,168
2007	377,117		945,243		511,687	1,834,047	21,466	64,820		23,437	1,943,770
2006	303,183		731,929		423,724	1,458,836	20,188	68,688		18,967	1,566,679
2005	295,736		671,152		398,004	1,364,892	19,363	66,079		17,927	1,468,261
2004	292,895		515,750		287,228	1,095,873	15,232	56,292		17,758	1,185,155
2003*	199,217		492,562		270,280	962,059	13,305	50,433		16,038	1,041,835

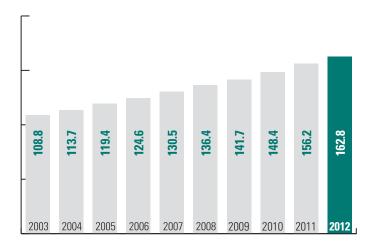
<sup>\*</sup>The General Assembly suspended employer contributions for state employees in FY 2003.

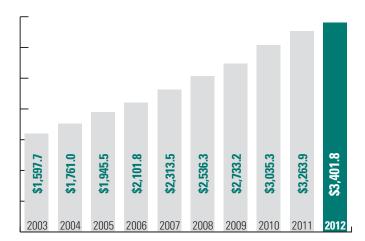
# FIGURE 5.4 - NUMBER OF RETIREES AND BENEFICIARIES

AT JUNE 30 (EXPRESSED IN THOUSANDS)

## FIGURE 5.5 - RETIREMENT BENEFITS PAID

FISCAL YEARS 2003-2012 (EXPRESSED IN MILLIONS)





<sup>\*\*</sup>The General Assembly suspended employer contributions for all state employees, SPORS, VaLORS and JRS for April, May and the first half of June 2010 and for teachers for the entire last quarter of FY 2010.

<sup>\*\*\*</sup> The General Assembly funded contribution rates for all state employee groups and teachers significantly below those certified by the Board of Trustees for FY 2011. For FY 2012, the funding for all state employee groups remained at low levels for the first three quarters of the year.

# SCHEDULE OF PENSION TRUST FUND ADDITIONS BY SOURCE

FISCAL YEARS 2003-2012

(EXPRESSED IN THOUSANDS)

100/12 12/110 200	0 2012			Employer Co	ntribut	ions			(LXI II	LUULD	IN THOUSANDS
Year Ended June 30		Member atributions	-	For Members	[	Employer Share		Investment Income (Loss)	Other		Total
				Virgini	a Retire	ement Syste	em (V	RS)			
2012* 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$	208,243 26,529 26,225 20,254 24,843 29,489 38,825 63,503 85,769 127,578	\$	557,522 712,560 736,413 743,762 716,797 680,023 638,242 599,769 564,020 499,077		970,331 741,833 1,001,246 1,214,972 1,280,773 1,124,535 781,769 701,620 446,084 335,404	\$	614,613 8,405,834 6,014,601 (11,106,018) (2,677,358) 9,426,035 5,042,575 4,453,335 5,751,277 935,415	\$ 3,782 1,290 1,083 8,668 290 338 185 743 908 2,682		2,354,491 9,888,046 7,779,568 (9,118,362) (654,655) 11,260,420 6,501,596 5,818,970 6,848,058 1,900,156
			St	tate Police Of	fficers'	Retirement	Syste	em (SPORS)			
2012* 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$	5,167 121 47 57 149 213 304 494 790 556	\$	1 4,742 4,945 5,034 5,061 4,895 4,627 4,392 4,037 3,972	\$	11,443 7,480 15,755 20,189 21,008 16,358 15,257 14,477 10,405 8,777	\$	6,853 99,209 72,609 (135,929) (33,367) 117,501 63,475 56,481 73,977 11,929	\$ - 87 20 - - - -	\$	23,464 111,552 93,356 (110,562) (7,129) 138,967 83,663 75,844 89,209 25,234
			Vir	rginia Law Of	ficers' l	Retirement	Syste	em (VaLORS)			
2012* 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$	17,510 941 196 212 291 371 534 700 880 927	\$	48 16,102 17,208 17,871 17,723 16,127 15,492 14,869 14,703 14,559	\$	24,644 17,380 38,943 50,988 56,025 48,322 52,662 50,510 40,709 34,947	\$	11,195 147,982 103,488 (181,112) (44,270) 143,664 71,905 59,525 70,668 13,069	\$ 110 130 104 519 274 171 255 230	\$	53,507 182,535 159,939 (111,522) 30,043 208,655 140,848 125,834 126,960 63,502
				Judicia	al Retire	ement Syste	em (J	RS)			
2012 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$	47 32 30 20 21 92 108 159 197 88	\$	2,921 3,003 3,108 3,043 2,945 2,815 2,653 2,499 2,371 2,346	\$	18,907 17,303 17,068 21,001 22,532 20,530 16,206 15,269 15,190 13,604	\$	4,576 58,587 42,430 (77,947) (19,305) 65,964 35,368 31,379 40,947 6,543	\$ - - 50 - - - - -	\$	26,451 78,925 62,636 (53,833) 6,193 89,401 54,335 49,306 58,705 22,581

<sup>\*</sup>Member contributions and employer contributions for members reflect the shift to member-paid retirement contributions for state employees, except judges, effective July 1, 2011.

# SCHEDULE OF PENSION TRUST FUND DEDUCTIONS BY TYPE

FISCAL YEARS 2003-2012

(EXPRESSED IN THOUSANDS)

Year Ended June 30	Retirement Benefits	Refunds	Administrative Expenses	Other	Total
		Virginia Retirem	nent System (VRS)		
2012 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$ 3,257,359 3,125,772 2,907,204 2,617,313 2,427,543 2,219,350 2,015,557 1,865,776 1,692,166 1,537,762	\$ 84,577 96,209 88,671 86,688 97,574 89,716 85,804 78,709 80,237 67,473	\$ 25,475 25,082 23,720 30,692 24,677 23,686 19,724 18,182 18,119 16,201	\$ 694 6,464 3,911 668 298 178 258 230	\$ 3,368,105 \$ 3,253,527 3,023,506 2,735,361 2,550,092 2,332,930 2,121,343 1,962,897 1,790,522 1,621,436
0040	Ф 40.440		•	•	Φ 40.000
2012 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$ 46,113 46,259 42,714 40,919 39,382 33,867 32,309 30,487 26,336 23,594	\$ 319 279 496 469 730 1,221 596 1,053 731 863	\$ 243 222 257 340 299 301 231 203 213 205	\$ 7 68 46 - - - - - -	\$ 46,682 46,828 43,513 41,728 40,411 35,389 33,136 31,743 27,280 24,662
		Virginia Law Officers' Re	tirement System (VaLORS	S)	
2012 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$ 64,849 59,749 53,758 45,890 40,805 35,019 29,202 25,100 19,784 15,020	\$ 4,027 4,051 3,919 4,151 4,586 4,828 4,830 4,927 3,998 3,763	\$ 366 395 373 471 378 365 263 208 196 151	\$ 15 103 66 - - - - - -	\$ 69,257 64,298 58,116 50,512 45,769 40,212 34,295 30,235 23,978 18,934
		Judicial Retirem	nent System (JRS)		
2012 2011 2010 2009 2008 2007 2006 2005 2004 2003	\$ 33,454 32,115 31,598 29,101 28,538 25,253 24,717 24,108 22,706 21,359	\$ - 5 - 40 45 - - 42 - 51	\$ 143 158 151 198 168 169 130 113 117	\$ 5 40 27 - - - - -	\$ 33,602 32,318 31,776 29,339 28,751 25,422 24,847 24,263 22,823 21,523

# SCHEDULE OF RETIREMENT BENEFITS BY SYSTEM

FISCAL YEARS 2003-2012

(EXPRESSED IN THOUSANDS)

		Virginia Ret	irem	ent System	)		S	tate Police Officers'	١	Virginia Law Officers'	Judicial	
Year Ended June 30	State	Teachers	,	Political Subdivision	S	Sub-Total	ſ	Retirement System		Retirement System	Retirement System	Total
2012	\$ 961,209	\$ 1,654,377	\$	641,773	\$	3,257,359	\$	46,113	\$	64,849	\$ 33,454	\$ 3,401,775
2011	931,893	1,599,208		594,671		3,125,772		46,259		59,749	32,115	3,263,895
2010	898,226	1,462,638		546,340		2,907,204		42,714		53,758	31,598	3,035,274
2009	790,472	1,338,776		488,065		2,617,313		40,919		45,890	29,101	2,733,223
2008	736,053	1,245,201		446,289		2,427,543		39,382		40,805	28,538	2,536,268
2007	686,258	1,138,980		394,112		2,219,350		33,867		35,019	25,253	2,313,489
2006	623,571	1,037,509		354,477		2,015,557		32,309		29,202	24,717	2,101,785
2005	589,113	959,268		317,395		1,865,776		30,487		25,100	24,108	1,945,471
2004	552,282	855,113		284,771		1,692,166		26,336		19,784	22,706	1,760,992
2003	503,249	782,652		251,861		1,537,762		23,594		15,020	21,359	1,597,735

# SCHEDULE OF RETIREMENT BENEFITS BY TYPE

FISCAL YEARS 2003-2012

(EXPRESSED IN THOUSANDS)

Year Ended June 30	Service Benefits	Disability Benefits	Survivor Benefits	Total
2012	\$ 3,080,562	\$ 293,336	\$ 27,877	\$ 3,401,775
2011	2,948,702	288,951	26,242	3,263,895
2010	2,724,900	285,802	24,572	3,035,274
2009	2,434,353	276,382	22,488	2,733,223
2008	2,252,981	263,427	19,860	2,536,268
2007	2,045,400	250,212	17,877	2,313,489
2006	1,849,239	236,266	16,280	2,101,785
2005	1,708,147	222,632	14,692	1,945,471
2004	1,537,173	210,385	13,434	1,760,992
2003	1,386,236	199,391	12,108	1,597,735



# SCHEDULE OF REFUNDS BY TYPE

FISCAL YEARS 2003-2012

(EXPRESSED IN THOUSANDS)

Year Ended June 30	Separations	Death	Total
2012	\$ 75,668	\$ 13,255	\$ 88,923
2011	87,221	13,323	100,544
2010	79,600	13,486	93,086
2009	77,498	13,850	91,348
2008	88,732	14,203	102,935
2007	88,661	7,104	95,765
2006	79,744	11,486	91,230
2005	76,296	8,435	84,731
2004	73,715	11,251	84,966
2003	64,203	7,947	72,150

## SCHEDULE OF RETIREES AND BENEFICIARIES BY TYPE OF RETIREMENT

AS OF JUNE 30, 2012

Type of Retirement

					' ' '	po or riotironic	7110			
Min. Guaranteed Benefit Amount	Number of Retirees	Service Retirement	Early Retirement Window	50/30 Service Retirement	1991 Early Faculty Ret. Window	Regular Disability	Survivor Death-in- Service	Line-of-Duty (LOD) Disability	Survivor LOD Death- in-Service	50/10 Service Retirement
\$ 1-200	14,784	12,711	3	-	1	660	607	53	4	745
201-400	19,971	15,921	161	3	-	2,057	497	118	9	1,205
401-600	16,908	12,828	370	26	1	2,407	315	234	22	705
601-800	14,255	10,480	464	58	2	2,129	213	402	21	486
801-1,000	12,447	9,049	603	158	4	1,665	146	410	21	391
1,001-1,200	10,998	7,933	578	349	7	1,361	124	332	14	300
1,201-1,400	9,245	6,673	524	424	16	1,023	80	259	7	239
1,401-1,600	8,715	6,300	467	603	22	795	68	219	9	232
1,601-1,800	8,141	5,890	335	872	29	603	46	172	4	190
1,801-2,000	8,605	6,190	261	1,274	31	489	60	168	1	131
Over 2,000	38,682	30,424	501	5,254	123	1,343	203	518	6	310
Totals	162,751	124,399	4,267	9,021	236	14,532	2,359	2,885	118	4,934

## SCHEDULE OF RETIREES AND BENEFICIARIES BY PAYOUT OPTION SELECTED

AS OF JUNE 30, 2012

								Pay	out Option	Selected							
M	in. Guaranteed Benefit Amount	A	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р
\$	1-200	12,070	37	536	133	755	4	64	3	-	1	675	-	326	87	85	8
	201-400	15,929	18	566	223	738	5	805	23	2	28	649	-	684	112	169	20
	401-600	12,723	20	448	289	722	10	1,147	43	-	68	498	-	591	109	219	21
	601-800	10,342	12	365	303	739	11	971	39	-	86	426	-	603	100	233	25
	801-1,000	8,692	3	324	353	768	17	651	26	1	54	431	-	629	105	348	45
1,	,001-1,200	7,394	-	313	343	652	11	477	21	1	37	269	-	719	117	549	95
1,	201-1,400	6,206	2	250	318	425	20	291	12	1	16	199	-	664	107	622	112
1,	401-1,600	5,746	1	245	300	302	30	196	4	-	24	147	-	627	119	807	167
1,	601-1,800	5,345	-	201	275	166	31	104	3	-	6	102	-	623	140	920	225
1,	801-2,000	5,504	-	170	283	122	28	85	3	-	4	80	-	595	128	1,330	273
(	ver 2,000	20,930		575	837	188	173	109	8		8	183	1	4,225	1,129	8,703	1,613
	Totals	110,881	93	3,993	3,657	5,577	340	4,900	185	5	332	3,659	1	10,286	2,253	13,985	2,604

- A- Basic Benefit
- B- Increased Basic Benefit
- C- 100% Survivor Option
- D- Variable Survivor Option
- E- Social Security Leveling Benefit
- F- Special Survivor Option
- G- Minimum Guaranteed Disability Basic Benefit
- H- Minimum Guaranteed Disability Variable Survivor Option
- I- Disability 100% Survivor Option
- J- Special Disability Survivor Option
- K- Leveling Benefit

- L- Leveling Benefit/Rollover
- M- Survivor Option
- N- Advance Pension Option
  O- Partial Lump-Sum Option Payment (PLOP) with Basic Benefit
- P- PLOP with Survivor Option

# SCHEDULE OF AVERAGE BENEFIT PAYMENTS

FOR RETIREMENTS EFFECTIVE JULY 1, 2008 TO JUNE 30, 2012

		Years of Service Credit									
			1-10		11-15		16-20	21-25		26-30	Over 30
FY 2012	Average Monthly Benefit Number of Active Retirees	\$	349.17 1,331	\$	628.04 1,309	\$	950.15 1,176	\$ 1,360.69 1,273	\$	2,149.70 1,453	\$ 2,843.02 3,367
FY 2011	Average Monthly Benefit Number of Active Retirees	\$	346.15 1,218	\$	590.10 1,196	\$	923.89 1,164	\$ 1,364.97 1,383	\$	2,058.50 1,637	\$ 2,791.19 4,318
FY 2010	Average Monthly Benefit Number of Active Retirees	\$	319.83 1,106	\$	585.59 954	\$	895.47 980	\$ 1,309.38 1,251	\$	1,977.48 1,543	\$ 2,750.03 4,303
FY 2009	Average Monthly Benefit Number of Active Retirees	\$	344.16 986	\$	578.17 859	\$	880.56 916	\$ 1,269.17 1,090	\$	2,024.64 1,377	\$ 2,669.86 3,063
FY 2008	Average Monthly Benefit Number of Active Retirees	\$	327.19 994	\$	575.47 857	\$	861.72 995	\$ 1,234.89 1,091	\$	2,024.96 1,615	\$ 2,610.24 3,271

# FIGURE 5.6 – DISTRIBUTION OF RETIREES BY PAYOUT OPTION SELECTED

ALL RETIREES AT JUNE 30, 2012

	Basic Benefit	Survivor Option	PLOP with Basic Benefit	PLOP with Survivor Option	Advance Pension Option	Total
VRS SPORS VaLORS	72.08% 52.05% 61.47%	11.02% 31.05% 17.60%	8.33% 9.95% 13.29%	1.47% 6.26% 3.96%	7.10% 0.69% 3.68%	100.00% 100.00% 100.00%
JRS	47.89%	32.59%	8.43%	8.43%	2.66%	100.00%
All Plans	<b>71.69</b> %	11.33%	8.43%	1.57%	6.98%	100.00%
FY 2012 RETIREES			PLOP with	PLOP with	Advance	
	Basic	Survivor	Basic	Survivor	Pension	
	Benefit	Option	Benefit	Option	Option	Total
VRS SPORS VaLORS JRS	66.73% 55.10% 60.39% 48.49%	11.75% 14.29% 10.86% 24.24%	17.17% 20.41% 17.89% 18.18%	2.60% 8.16% 4.15% 9.09%	1.75% 2.04% 6.71% 0.00%	100.00% 100.00% 100.00% 100.00%
All Plans	66.42%	11.77%	17.21%	2.70%	1.90%	100.00%

# **Retirement Benefit Payout Options**

Basic Benefit. The Basic Benefit is based on the unreduced (normal) retirement benefit calculation. It does not provide for a continuation of a benefit to a survivor. Upon the member's death, any remaining member contributions and accrued interest are paid in a lump sum to the member's beneficiary.

Partial Lump-Sum Option Payment (PLOP). Members who are in active service for one or more years beyond their eligibility for an unreduced retirement benefit are eligible to elect a partial lump-sum payment of their member contributions and accrued interest equal to one, two or three times their annual retirement benefit, depending on how long they work beyond their unreduced retirement eligibility. The monthly benefit is actuarially reduced accordingly. This option is available with the Basic Benefit or Survivor Option.

**Survivor Option.** Members may choose a whole percentage of their benefit, between 10% and 100%, to continue as a lifetime benefit to a survivor upon their death. The member's benefit is actuarially reduced accordingly.

Advance Pension Option. With this option, members elect to receive a temporary higher benefit until at least age 62 up to their normal retirement age under Social Security, as elected by the member. At that point, the monthly benefit is permanently reduced on an actuarially equivalent basis.

FIGURE 5.7 - DISTRIBUTION OF RETIREES BY YEARS OF SERVICE CREDIT

ALL RETIREES AT JUNE 30, 2012

	1-10 Years	11-20 Years	21-30 Years	Over 30 Years	Total
VRS	11.12%	23.93%	29.81%	35.14%	100.00%
SPORS	2.57%	3.98%	20.90%	72.55%	100.00%
VaLORS	7.59%	19.08%	53.16%	20.17%	100.00%
JRS	0.80%	2.41%	6.63%	90.16%	100.00%
All Plans	10.97%	23.65%	30.09%	35.29%	100.00%
FY 2012 RETIREES					
	1-10	11-20	21-30	Over 30	
	Years	Years	Years	Years	Total
VRS	13.63%	25.31%	26.77%	34.29%	100.00%
SPORS	2.50%	5.00%	32.50%	60.00%	100.00%
VaLORS	9.65%	21.22%	48.87%	20.26%	100.00%
JRS	0.00%	3.85%	19.23%	76.92%	100.00%
All Plans	13.42%	25.04%	27.47%	34.07%	100.00%

# FIGURE 5.8 – DISTRIBUTION OF RETIREES BY AGE AT RETIREMENT

ALL RETIREES AT JUNE 30, 2012

	Under Age 55	Age 55-59	Age 60-65	Over Age 65	Total
VRS	17.11%	26.70%	45.63%	10.56%	100.00%
SPORS	47.42%	34.38%	16.25%	1.95%	100.00%
VaLORS	44.27%	26.64%	24.84%	4.25%	100.00%
JRS	1.68%	12.96%	43.94%	41.42%	100.00%
All Plans	17.64%	26.70%	45.15%	10.51%	100.00%
FY 2012 RETIREES					
	Under Age 55	Age 55-59	Age 60-65	Over Age 65	Total
VRS	11.65%	23.81%	46.69%	17.85%	100.00%
SPORS	40.00%	32.50%	25.00%	2.50%	100.00%
VaLORS	36.74%	29.71%	28.12%	5.43%	100.00%
JRS	7.41%	7.41%	44.44%	40.74%	100.00%
All Plans	12.54%	23.99%	46.01%	17.46%	100.00%

# FIGURE 5.9 - DISTRIBUTION OF RETIREES BY AVERAGE FINAL COMPENSATION

ALL RETIREES AT JUNE 30, 2012

	Up to \$10,000	\$10,001 - 20,000	\$20,001 - 30,000	\$30,001 - 40,000	\$40,001 - 50,000	\$50,001 - 70,000	Over \$70,000	Total
VRS SPORS VaLORS JRS	7.40% 4.34% 0.00% 3.87%	19.73% 6.22% 0.10% 2.19%	18.52% 8.31% 13.56% 1.18%	16.31% 14.98% 46.90% 4.88%	13.91% 19.10% 26.39% 6.23%	15.91% 28.85% 11.86% 11.95%	8.22% 18.20% 1.19% 69.70%	100.00% 100.00% 100.00% 100.00%
All Plans	7.26%	19.33%	18.35%	16.70%	14.09%	15.92%	8.35%	100.00%
FY 2012 RETIR	EES							
	Up to	\$10,001 -	\$20,001 -	\$30,001 -	\$40,001 -	\$50,001 -	Over	
	\$10,000	20,000	30,000	40,000	50,000	70,000	\$70,000	Total
VRS SPORS VaLORS JRS	0.58% 0.00% 0.00% 0.00%	6.90% 0.00% 0.00% 0.00%	11.89% 0.00% 1.92% 0.00%	15.57% 2.50% 55.58% 0.00%	14.48% 0.00% 27.48% 0.00%	28.54% 37.50% 14.06% 0.00%	22.04% 60.00% 0.96% 100.00%	100.00% 100.00% 100.00% 100.00%
All Plans	0.56%	6.65%	11.49%	16.73%	14.79%	28.04%	21.74%	100.00%

# SCHEDULE OF FUNDING PROGRESS - VRS PENSION PLANS

(DOLLARS IN THOUSANDS)

LARS IN THOUSANDS)	(DULI					
UAAL as a Percentage of Covered Payroll (b-a)/(c)	Covered Payroll (c)	Funded Ratio (a/b)	Unfunded AAL (UAAL) (b-a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Actuarial Value of Assets (a)	Actuarial Valuation Date June 30
			VRS - State			
162.8% 137.7% 79.5% 56.3% 69.9% 76.4% 64.2% 23.3% (1.7%) (16.2%)	\$ 3,686,259 3,514,396 3,619,478 3,640,692 3,467,388 3,301,286 3,100,479 2,946,067 2,852,370 2,940,501	70.6% 75.2% 84.0% 88.0% 85.1% 83.3% 85.8% 94.6% 100.4% 104.1%	\$ 6,001,683 4,838,599 2,875,978 2,050,594 2,422,439 2,521,672 1,989,099 687,447 (47,565) (476,448)	\$ 20,407,958 19,539,453 17,925,879 17,096,942 16,279,781 15,064,062 14,007,274 12,669,013 11,860,803 11,490,889	\$ 14,406,275 14,700,854 15,049,901 15,046,348 13,857,342 12,542,390 12,018,175 11,981,566 11,908,368 11,967,337	2011 2010 2009* 2008 2007 2006 2005* 2004 2003 2002
			VRS - Teachers			
182.1% 163.5% 113.1% 93.6% 97.9% 105.6% 95.2% 51.5% 25.4% 2.4% 37.3% 37.6% 31.1% 52.1% 24.4% 7.0%	\$ 6,922,130 7,119,889 7,160,842 6,896,432 6,604,643 6,195,421 5,844,860 5,491,142 5,109,840 4,950,363 \$ 4,100,470 4,123,505 4,167,324 4,021,468 3,761,991 3,504,844 3,266,806 3,072,693 2,922,419	76.4% 77.8% 85.1% 88.9% 88.4% 89.6% 83.7% 91.8% 97.5%	\$ 12,605,608 11,640,899 8,095,849 6,455,839 6,464,967 6,542,872 5,565,731 2,829,899 1,297,532 119,980 3S - Political Subdivisi \$ 4,018,472 3,592,328 2,166,151 1,499,671 1,413,617 1,088,607 1,701,010 749,442 204,980	\$ 17,005,070 16,172,372 14,536,618 13,499,216 12,166,854 10,483,777 10,415,489 9,116,119 8,356,676	\$ 25,166,124 25,447,677 25,764,665 25,502,482 23,204,871 20,731,192 19,639,994 19,343,319 19,182,560 19,028,338 \$ 12,986,598 12,580,044 12,370,467 11,999,545 10,753,237 9,395,170 8,714,479 8,366,677 8,151,696	2011 2010 2009* 2008 2007 2006 2005* 2004 2003 2002 2011 2010 2009* 2008 2007 2006 2005* 2006 2005*
(12.1%)	2,778,116	104.4%	(335,627)	7,625,953	7,961,580	2002
			VRS - Total			
153.8% 136.0% 87.9% 68.7% 74.5% 78.1% 75.8% 37.1% 13.4% (6.5%)	\$ 14,708,859 14,757,790 14,947,644 14,558,592 13,834,022 13,001,551 12,212,145 11,509,902 10,884,629 10,668,980	69.9% 72.4% 80.2% 84.0% 82.3% 80.8% 81.3% 90.3% 96.4% 101.8%	\$ 22,625,763 20,071,826 13,137,978 10,006,104 10,301,023 10,153,151 9,255,840 4,266,788 1,454,947 (692,095)	\$ 75,184,760 72,800,401 66,323,011 62,554,479 58,116,473 52,821,903 49,628,488 43,958,350 40,697,571 38,265,160	\$ 52,558,997 52,728,575 53,185,033 52,548,375 47,815,450 42,668,752 40,372,648 39,691,562 39,242,624 38,957,255	2011 2010 2009* 2008 2007 2006 2005* 2004 2003 2002

<sup>\*</sup>Revised economic and demographic assumptions due to experience study.

# Other Employee Benefit Trust Funds

# FIGURE 5.10 – ANALYSIS OF CHANGES AND GROWTH IN PLAN NET ASSETS – GROUP LIFE INSURANCE FUND

FOR THE YEARS ENDED JUNE 30 (EXPRESSED IN THOUSANDS)

	2003*	2004*	2005*	2006*	2007	2008	2009	2010*	2011	2012
Net Assets Available– Beginning of Year	\$838,601	\$751,747	\$778,464	\$ 71,817	\$751,361	\$962,328	\$937,146	\$713,812	\$783,058	\$833,065
Funding: Member and Employer Contributions and Other										
Additions Benefits and Administrative	44	20	(31)	52	169,824	158,823	135,063	94,860	45,048	47,285
Expenses	(105,195)	(107,018)	(98,163)	(112,695)	(119,738)	(133,407)	(153,083)	(139,344)	(146,550)	(141,026)
Net Funding	(105,151)	(106,998)	(98,194)	(112,643)	50,086	25,416	(18,020)	(44,484)	(101,502)	(93,741)
Investment Income: Interest, Dividends and										
Other Investment Income Net Appreciation	10,706	10,366	13,256	14,546	19,078	17,908	13,582	14,128	17,924	16,301
(Depreciation) in Fair Value	7,591	123,349	78,291	77,641	141,803	(68,506)	(218,896)	99,602	133,585	(9,006)
Net Investment Income	18,297	133,715	91,547	92,187	160,881	(50,598)	(205,314)	113,730	151,509	7,295
Net Increase (Decrease)	(86,854)	26,717	(6,647)	(20,456)	210,967	(25,182)	(223,334)	69,246	50,007	(86,446)
Net Assets Available– End of Year	\$751,747	\$778,464	\$771,817	\$751,361	\$962,328	\$937,146	\$713,812	\$783,058	\$833,065	\$746,619

<sup>\*</sup> The group life insurance contribution rates for the last quarter of fiscal years 2010 and for all of fiscal years 2006, 2005, 2004 and 2003 were zero as a result of a statutory premium holiday. Amounts shown in premium holiday years are adjustments and contributions for new employers.



# SCHEDULE OF GROUP LIFE INSURANCE ADDITIONS BY SOURCE

FISCAL YEARS 2003-2012 (EXPRESSED IN THOUSANDS)

Contributions Year Ended Political Investment June 30 Teachers Subdivisions Other Total State Sub-Total Income (Loss) 2012 \$ 14,243 \$ 20,183 \$ 46,534 7,295 \$ 751 \$ 54,580 12,108 2011 13,348 19,427 11,920 44,695 151,509 353 196,557 2010\* 208,590 28,685 40,502 25,673 94,860 113,730 2009 40,369 58,855 35,839 135,063 (205,314)(70,251)2008 52,503 60,405 45,915 158,823 (50,598)108,225 169,824 330,705 2007 51,116 74,442 44,266 160,881 2006\* (2)54 52 92,187 92,239 2005\* 1 (33)1 (31)91,547 91,516 2004\* 1 19 20 133,715 133,735 2003\* 5 22 17 44 18,297 18,341

# SCHEDULE OF GROUP LIFE INSURANCE DEDUCTIONS BY TYPE

FISCAL YEARS 2003-2012 (EXPRESSED IN THOUSANDS)

Year Ended			Group	Life Claims		۸dmir	nistrative				
June 30	Active		Retired		Sub-Total	Expenses		Other		Total	
2012	\$	54,605	\$	85,338	\$ 139,943	\$	77	\$	1,006	\$ 141,026	
2011		51,236		93,791	145,027		484		1,039	146,550	
2010		46,263		91,570	137,833		663		848	139,344	
2009		64,119		87,550	151,669		700		714	153,083	
2008		55,814		76,279	132,093		686		628	133,407	
2007		46,322		72,305	118,627		568		543	119,738	
2006		43,140		68,350	111,490		716		489	112,695	
2005		37,139		59,902	97,041		678		444	98,163	
2004		42,290		63,741	106,031		615		372	107,018	
2003		44,614		59,661	104,275		644		276	105,195	

<sup>\*</sup>The group life insurance contribution rates for the last quarter of fiscal year 2010 and for all of fiscal years 2006, 2005, 2004 and 2003 were zero as a result of a statutory premium holiday. Amounts shown in premium holiday years are adjustments and contributions for new employers.

# FIGURE 5.11 – ANALYSIS OF CHANGES AND GROWTH IN PLAN NET ASSETS – RETIREE HEALTH INSURANCE CREDIT FUND

FOR THE YEARS ENDED JUNE 30 (EXPRESSED IN THOUSANDS)

	2003	2004	2005	2006	2007	2008*	2009	2010**	2011	2012
Net Assets Available– Beginning of Year	\$ 76,184	\$ 92,222	\$120,895	\$146,956	\$178,068	\$224,606	\$251,634	\$231,994	\$244,958	\$209,033
<b>Funding:</b> Employer Contributions										
and Other Additions Reimbursements and	74,123	78,383	81,995	86,913	92,919	148,908	146,333	100,613	50,052	51,356
Administrative Expenses	(61,350)	(65,292)	(69,474)	(72,819)	(80,803)	(109,426)	(115,878)	(120,872)	(126,963)	(131,435)
Net Funding	12,773	13,091	12,521	14,094	12,116	39,482	30,455	(20,259)	(76,911)	(80,079)
Investment Income: Interest, Dividends and										
Other Investment Income Net Appreciation (Depreciation	1,910	1,207	1,960	2,685	4,082	4,407	3,314	4,127	4,849	2,997
in Fair Value	1,355	14,375	11,580	14,333	30,340	(16,861)	(53,409)	29,096	36,137	(4,717)
Net Investment Income	3,265	15,582	13,540	17,018	34,422	(12,454)	(50,095)	33,223	40,986	(1,720)
Net Increase (Decrease)	16,038	28,673	26,061	31,112	46,538	27,028	(19,640)	12,964	(35,925)	(81,799)
Net Assets Available– End of Year	\$ 92,222	\$120,895	\$146,956	\$178,068	\$224,606	\$251,634	\$231,994	\$244,958	\$209,033	\$127,234

<sup>\*</sup>The health insurance credit for teachers was raised to \$4.00 for each year of service credit per month with no cap on the benefit. The balance in the Enhanced Retiree Health Insurance Credit Program for teachers was refunded to employers.

## SCHEDULE OF RETIREE HEALTH INSURANCE CREDIT ADDITIONS BY SOURCE

FISCAL YEARS 2003-2012 (EXPRESSED IN THOUSANDS)

		Contributions										
Year Ended June 30					Political Subdivisions Sub-Total					ivestment ome (Loss)	Other	Total
2012	\$	7,137	\$	42,245	\$	1,974	\$	51,356	\$	(1,720)	\$ -	\$ 49,636
2011		6,702		41,410		1,940		50,052		40,986	-	91,038
2010*		44,485		53,114		3,014		100,613		33,223	-	133,836
2009		66,256		77,205		2,872		146,333		(50,095)	-	96,238
2008		65,696		79,518		3,694		148,908		(12,454)	-	136,454
2007		55,289		34,019		3,611		92,919		34,422	-	127,341
2006		50,979		34,758		1,176		86,913		17,018	-	103,931
2005		48,196		32,745		1,054		81,995		13,540	-	95,535
2004		38,590		38,881		912		78,383		15,582	-	93,965
2003		38,576		34,739		808		74,123		3,265	-	77,388

<sup>\*</sup>The health insurance credit contribution rate for the last quarter of fiscal year 2010 was zero as a result of a statutory contribution holiday.

<sup>\*\*</sup>The health insurance credit contribution rate for the last quarter of fiscal year 2010 was zero as a result of a statutory contribution holiday.

# SCHEDULE OF RETIREE HEALTH INSURANCE CREDIT DEDUCTIONS BY TYPE

FISCAL YEARS 2003-2012 (EXPRESSED IN THOUSANDS)

Retiree Health Insurance Reimbursements

Year Ended June 30	State Teacher		Teacher	Political Subdivisions Sub-Total			Sub-Total	Adm Ex	C	)ther	Total		
2012	\$	59,882	\$	69,638	\$	1,582	\$	131,102	\$	333	\$	-	\$ 131,435
2011		58,433		66,608		1,459		126,500		463		-	126,963
2010		56,337		62,573		1,359		120,269		603		-	120,872
2009		52,742		61,229		1,307		115,278		600		-	115,878
2008*		49,248		58,748		993		108,989		437		-	109,426
2007		47,263		32,308		876		80,447		356		-	80,803
2006		41,560		30,177		745		72,482		337		-	72,819
2005		40,038		28,255		673		68,966		508		-	69,474
2004		38,088		26,247		585		64,920		372		-	65,292
2003		36,015		24,524		487		61,026		324		-	61,350

<sup>\*</sup>The health insurance credit reimbursement for teachers was increased to \$4.00 for each year of service credit per month with no cap on the benefit.

# FIGURE 5.12 – ANALYSIS OF CHANGES AND GROWTH IN PLAN NET ASSETS – DISABILITY INSURANCE TRUST FUND

FOR THE YEARS ENDED JUNE 30 (EXPRESSED IN THOUSANDS)

	2003	2004	2005	2006	2007	2008	2009	2010*	2011*	2012*
Net Assets Available Beginning of Year	\$ 57,906	\$ 78,383	\$103,322	\$144,234	\$191,872	\$263,586	\$313,521	\$290,481	\$336,213	\$369,071
Funding: Employer Contributions	24.012	25 247	E4 E0E	E7 001	CE 72C	00.420	71 007	21 021	C	70
and Other Additions Disability Insurance Benefits and Administrative Expenses	34,813 (17,571)	35,247 (24,506)	54,505 (26,316)	57,991 (27,915)	65,726 (34,048)	99,430 (32,697)	71,337 (28,800)	31,021 (28,415)	6 (29,001)	78 (28,955)
Net Funding	17,242	10,741	28,189	30,076	31,678	66,733	42,537	2,606	(28,995)	(28,877)
Investment Income: Interest, Dividends and										
Other Investment Income Net Appreciation (Depreciation	1,893	1,101	1,843	2,771	4,749	5,946	4,339	5,358	7,317	7,048
in Fair Value	1,342	13,097	10,880	14,791	35,287	(22,744)	(69,916)	37,768	54,536	(3,270)
Net Investment Income	3,235	14,198	12,723	17,562	40,036	(16,798)	(65,577)	43,126	61,853	3,778
Net Increase (Decrease)	20,477	24,939	40,912	47,638	71,714	49,935	(23,040)	45,732	32,858	(25,099)
Net Assets Available– End of Year	\$ 78,383	\$103,322	\$144,234	\$191,872	\$263,586	\$313,521	\$290,481	\$336,213	\$369,071	\$343,972

<sup>\*</sup>The disability insurance contribution rate for fiscal year 2011 and fiscal year 2012 and for the last quarter of fiscal year 2010 was zero as a result of a statutory contribution holiday.

#### SCHEDULE OF DISABILITY INSURANCE TRUST FUND ADDITIONS BY SOURCE

FISCAL YEARS 2008-2012 (EXPRESSED IN THOUSANDS)

Year Ended June 30	Contr	ibutions	I	nvestment Income	Trans and C Additio	ther	Total
			Long-Term	Disability Progra	m		
2012	\$	67	\$	3,378	\$		\$ 3,445
2011		5		55,686		-	55,691
2010		24,196		39,586		7,029	70,811
2009		61,371		(59,852)		-	1,519
2008*		66,606		(15,332)		-	51,274
			Long-Te	erm Care Program	l		
2012	\$	11	\$	400	\$	-	\$ 411
2011		1		6,167		-	6,168
2010		6,825		3,540		-	10,365
2009		9,966		(5,725)		-	4,241
2008*		11,754		(1,466)	2	21,070	31,358
		Tot	al Disabilit	ty Insurance Trust	Fund		
2012	\$	78	\$	3,778	\$	-	\$ 3,856
2011		6		61,853		-	61,859
2010		31,021		43,126		7,029	81,176
2009		71,337		(65,577)		-	5,760
2008*		78,360		(16,798)	2	21,070	82,632

<sup>\*</sup>Fiscal year 2008 was the first year for program activity with the current program design.

<sup>\*\*</sup>Transfers and Other Additions in fiscal year 2008 was a transfer of assets from a fully insured plan. Transfers and Other Additions in fiscal year 2010 includes a transfer of \$7,029,000 between long-term care and long-term disability.



#### SCHEDULE OF DISABILITY INSURANCE TRUST FUND DEDUCTIONS BY TYPE

FISCAL YEARS 2008-2012 (EXPRESSED IN THOUSANDS)

Year Ended June 30	Long-Term Disability Benefits	Long-Term Care and Costs	Third-Party Administrator Administrative Services	VRS Administrative Expenses	Transfers and Other Expenses **	Total
		Long	g-Term Disability Pro	gram		
2012 2011 2010 2009 2008*	\$ 20,924 20,050 19,771 19,076 19,675	\$ - - - - -	\$ 6,974 7,512 7,191 8,285 8,438	\$ 425 585 747 716 583	\$ 32 148 25 -	\$ 28,355 28,295 27,734 28,077 28,696
		L	ong-Term Care Progr	am		
2012 2011 2010 2009 2008*	\$ - - - -	\$ 546 624 612 655 3,098	\$ - - - - -	\$ 50 65 67 68 903	\$ 4 17 7,031 -	\$ 600 706 7,710 723 4,001
Total Disability Insurance Trust Fund						
2012 2011 2010 2009 2008*	\$ 20,924 20,050 19,771 19,076 19,675	\$ 546 624 612 655 3,098	\$ 6,974 7,512 7,191 8,285 8,438	\$ 475 650 814 784 1,486	\$ 36 165 7,056 -	\$ 28,955 29,001 35,444 28,800 32,697

<sup>\*</sup>Fiscal year 2008 is the first year for program activity with the current program design.

<sup>\*\*</sup> Transfers and Other Expenses in fiscal year 2010 includes a transfer of \$7,029,000 between long-term care and long-term disability.



# **VRS-Participating Employers**

More than 800 employers participate in the Virginia Retirement System (VRS) on behalf of their employees. Employers include state agencies, public colleges and universities, school divisions and political subdivisions. The following employers were participating in VRS as of June 30, 2012:

#### PARTICIPATING POLITICAL SUBDIVISIONS: 454

A - retirement only B - retirement and group life insurance
C - retirement, group life insurance and retiree health insurance credit D - retirement and retire health insurance credit

#### COUNTIES: 93

COUNTIES: 93	
Accomack County - B	Cumberland County - B
Albemarle County - B	Dickenson County - A
Alleghany County - B	Dinwiddie County - B
Amelia County - C	Essex County - B
Amherst County - C	Fauquier County - B
Appomattox County - B	Floyd County - B
Augusta County - B	Fluvanna County - C
Bath County - B	Franklin County - B
Bedford County - B	Frederick County - B
Bland County - C	Giles County - B
Botetourt County - B	Gloucester County - C
Brunswick County - B	Goochland County - B
Buchanan County - B	Grayson County - B
Buckingham County - B	Greene County - C
Campbell County - B	Greensville County - C
Caroline County - B	Halifax County - C
Carroll County - B	Hanover County - C
Charles City County - B	Henrico County - B
Charlotte County - B	Henry County - C
Chesterfield County - B	Highland County - B
Clarke County - B	Isle of Wight County - C
Craig County - C	James City County - C
Culpeper County - B	King & Queen County - B

King George County - B
King William County - B
Lancaster County - B
Lee County - B
Loudoun County - B
Louisa County - C
Lunenburg County - B
Madison County - C
Mathews County - B
Mecklenburg County - B
Middlesex County - B
Montgomery County - B
Nelson County - B
New Kent County - B
Northampton County - B
Northumberland County - C
Nottoway County - B
Orange County - B
Page County - B
Patrick County - B
Pittsylvania County - C
Powhatan County - B
Prince Edward County - B

Prince George County - B	
Prince William County - C	
Pulaski County - C	
Rappahannock County - C	
Richmond County - B	
Roanoke County - C	
Rockbridge County - B	
Rockingham County - B	
Russell County - C	
Scott County - B	
Shenandoah County - C	
Smyth County - B	
Southampton County - C	
Spotsylvania County - B	
Stafford County - C	
Surry County - B	
Sussex County - B	
Tazewell County - C	
Warren County - B	
Washington County - C	
Westmoreland County - C	
Wise County - C	
Wythe County - C	
York County - C	

#### CITIES AND TOWNS: 162

City of Alexandria - A	City of Harrisonburg - B
City of Bedford - B	City of Hopewell - B
City of Bristol - B	City of Lexington - B
City of Buena Vista - B	City of Lynchburg - B
City of Chesapeake - B	City of Manassas - C
City of Colonial Heights - B	City of Manassas Park - B
City of Covington - C	City of Martinsville - B
City of Danville - A	City of Newport News - B
City of Emporia - B	City of Norfolk - B
City of Fairfax - A	City of Norton - B
City of Falls Church - B	City of Petersburg - B
City of Franklin - B	City of Poquoson - C
City of Fredericksburg - B	City of Portsmouth - B
City of Galax - B	City of Radford - C
City of Hampton - B	

City of Richmond - B
City of Roanoke - C
City of Salem - B
City of Staunton - B
City of Suffolk - B
City of Virginia Beach - B
City of Waynesboro - B
City of Williamsburg - B
City of Winchester - C
Town of Abingdon - B
Town of Alberta - B
Town of Altavista - B
Town of Amherst - B
Town of Appomattox - A

Town of Berryville - B
Town of Big Stone Gap - A
Town of Blacksburg - B
Town of Blackstone - B
Town of Bowling Green - B
Town of Boyce - B
Town of Boydton - B
Town of Boykins - A
Town of Bridgewater - B
Town of Brodnax - A
Town of Brookneal - B

Town of Ashland - B

Continued

#### CITIES AND TOWNS, cont.

Town of Burkeville - B Town of Cape Charles - B Town of Chase City - B Town of Chatham - B Town of Chilhowie - B Town of Chincoteague - B Town of Christiansburg - A Town of Clarksville - B Town of Clifton Forge - B Town of Coeburn - B Town of Colonial Beach - B Town of Courtland - B Town of Craigsville - B Town of Crewe - B Town of Culpeper - B Town of Dayton - B Town of Dillwyn - A Town of Dublin - B Town of Dumfries - C Town of Edinburg - A Town of Elkton - B Town of Exmore - A Town of Floyd - B Town of Front Royal - B Town of Gate City - A Town of Glasgow - B

Town of Gordonsville - B Town of Gretna - B Town of Grottoes - B Town of Grundy - B Town of Halifax - B Town of Hamilton - C Town of Haymarket - A Town of Haysi - A Town of Herndon - B Town of Hillsville - B Town of Hurt - B Town of Independence - A Town of Iron Gate - B Town of Jarratt - A Town of Jonesville - B Town of Kenbridge - C Town of Kilmarnock - C Town of La Crosse - A Town of Lawrenceville - C Town of Lebanon - A Town of Leesburg - B Town of Louisa - B Town of Lovettsville - B Town of Luray - B Town of Madison - B Town of Marion - B Town of McKenney - B

Town of Middleburg - B Town of Middletown - D Town of Mineral - A Town of Montross - B Town of Mt. Jackson - B Town of Narrows - A Town of New Market - B Town of Onancock - B Town of Onley - B Town of Orange - B Town of Parksley - B Town of Pearisburg - C Town of Pembroke - B Town of Pennington Gap - A Town of Pound - A Town of Pulaski - B Town of Purcellville - B Town of Quantico - B Town of Remington - B Town of Rich Creek - A Town of Richlands - A Town of Rocky Mount - B Town of Round Hill - B Town of Rural Retreat - A Town of Saltville - A Town of Scottsville - B Town of Shenandoah - C

Town of Smithfield - B Town of South Boston - B Town of South Hill - A Town of St. Paul - B Town of Stanley - C Town of Stephens City - B Town of Strasburg - C Town of Stuart - B Town of Tappahannock - A Town of Tazewell - A Town of Timberville - B Town of Urbanna - B Town of Victoria - B Town of Vienna - B Town of Vinton - B Town of Wakefield - A Town of Warrenton - B Town of Warsaw - B Town of Waverly - A Town of Weber City - B Town of West Point - B Town of Windsor - B Town of Wise - B Town of Woodstock - C Town of Wytheville - B

#### AUTHORITIES, COMMISSIONS, DISTRICTS, REGIONAL INSTITUTIONS AND COMMUNITY SERVICES BOARDS: 199

Accomack-Northampton Planning District Commission - B Albemarle County Service Authority - B Albemarle-Charlottesville Regional Jail - B Alexandria Redevelopment & Housing Authority - B Alexandria Renew Enterprises - A Alleghany Highlands Community Services Board - B Amherst County Service Authority - C Anchor Commission - B Appalachian Juvenile Commission - C Appomattox Regional Library - B Appomattox River Water Authority - B

Authority - B Bedford County Public Service Authority - B Bedford Public Library - B Big Sandy Soil & Water Conservation District - A Big Stone Gap Redevelopment & Housing Authority - A Big Walker Soil & Water Conservation District - A Blacksburg-Christiansburg-VPI Water Authority - B Blacksburg-VPI Sanitation Authority - B Blue Ridge Behavioral Healthcare - B Blue Ridge Juvenile Detention Center - B

Augusta County Service

Authority - B Bristol Redevelopment & Housing Authority - B **Bristol Virginia Utilities** Authority - B Brunswick Industrial Development Authority - B Campbell County Utilities & Service Authority - B Capital Region Airport Commission - B Castlewood Water & Sewage Authority - B Central Rappahannock Regional Library - B Central Virginia Community Services Board - B Central Virginia Regional Jail - B Central Virginia Waste Management Authority - C

Blue Ridge Regional Jail

Library - B Charlottesville-Albemarle Airport Authority - B Charlottesville Redevelopment & Housing Authority - B Chesapeake Bay Bridge & Tunnel District - B Chesapeake Redevelopment & Housing Authority - B Chesterfield County Health Center Commission - B Clinch Valley Soil & Water Conservation District - B Coeburn-Norton-Wise Regional Water Treatment Authority - B Colonial Behavioral Health - C Colonial Soil & Water Conservation District - B

Charles Pickney Jones Memorial

Continued

#### AUTHORITIES, COMMISSIONS, DISTRICTS, REGIONAL INSTITUTIONS AND COMMUNITY SERVICES BOARDS, cont.

Commonwealth Regional Council - A Crater Youth Care Commission - B Culpeper Soil & Water Conservation District - B **Cumberland Mountain Community** Services Board - B Cumberland Plateau Regional Housing Authority - B Daniel Boone Soil & Water Conservation District - B Danville-Pittsylvania Community Services Board - B Danville Redevelopment & Housing Authority - B Dinwiddie County Water Authority - B District 19 Community Services Board - C Eastern Shore Community Services Board - B Eastern Shore Public Library - B Eastern Shore Soil & Water Conservation District - B **Economic Development Authority** of Henrico County - B Evergreen Soil & Water Conservation District - B Fauguier County Water & Sanitation Authority - B Ferrum Water & Sewage Authority - A Franklin Redevelopment & Housing Authority - B Frederick County Sanitation Authority - C Fredericksburg-Stafford Park Authority - B Giles County Public Service Authority - B Goochland-Powhatan Community Services Board - B Greensville County Water & Sewer Authority - C Greensville-Emporia Department of Social Services - C Halifax Service Authority - B Hampton-Newport News Community Services Board - A Hampton Redevelopment & Housing Authority - B

Hampton Roads Planning District Commission - B Hampton Roads Regional Jail Authority - B Hampton Roads Sanitation District - C Hampton Roads Transit - B Handley Regional Library - B Harrisonburg-Rockingham Community Services Board - C Harrisonburg-Rockingham Regional Sewer Authority - B Henricopolis Soil & Water Conservation District - B Henry County Public Service Authority - C Holston River Soil & Water Conservation District - A Hopewell Redevelopment & Housing Authority - A Institute for Advanced Learning and Research - A James City Service Authority - C John Marshall Soil & Water Conservation District - B Lee County Redevelopment & Housing Authority - B Lee County Public Service Authority - B Lenwisco Planning District Commission - B Lonesome Pine Regional Library - B Lonesome Pine Soil & Water Conservation District - A Loudoun County Sanitation Authority - B Massanuttan Regional Library - B Meherrin Regional Library - C Meherrin River Regional Jail Authority - C Middle Peninsula-Northern Neck Community Services Board - B Middle Peninsula Planning District Commission - B Middle Peninsula Regional Security Center - B

Middle River Regional Jail

Conservation District - C

Authority - B

Monacan Soil & Water

Montgomery Regional Solid Waste Authority - B Mount Rogers Community Services Board - B Nelson County Service Authority - B New River Resource Authority - C New River Soil & Water Conservation District - B New River Valley Community Services Board - A New River Valley Juvenile Detention Home Commission - B New River Valley Planning District Commission - A New River Valley Regional Jail - B Norfolk Airport Authority - B Norfolk Redevelopment & Housing Authority - B Northern Neck-Essex County Group Home Commission - B Northern Neck Planning District Commission - B Northern Neck Regional Jail - B Northern Shenandoah Valley Regional Commission - B Northern Virginia Health Care Center Commission - A Northern Virginia Juvenile Detention Home - B Northwestern Community Services Board - B Opportunity Inc. of Hampton Roads - B Pamunkey Regional Jail - B Peaks of Otter Soil & Water Conservation District - B Peninsula Airport Commission - B Pepper's Ferry Regional Wastewater Authority - C Peter Francisco Soil & Water Conservation District - A Petersburg Redevelopment & Housing Authority - C Peumansend Creek Regional Jail - B Piedmont Community Services Board - B Piedmont Regional Jail - B

Piedmont Regional Juvenile

Detention Center - B

Pittsylvania County Service Authority - B Planning District One Behavioral Health Services Board - C Potomac and Rappahannock Transportation Commission - B Potomac River Fisheries Commission - B Prince William County Service Authority - C Prince William Soil & Water Conservation District - B Rappahannock Area Community Services Board - C Rappahannock Juvenile Center - C Rappahannock-Rapidan Community Services Board - B Rappahannock-Rapidan Regional Planning District Commission - B Rappahannock Regional Jail - B Region Ten Community Services Board - B Richmond Metropolitan Authority - B Richmond Redevelopment & Housing Authority - B Richmond Regional Planning District Commission - A Rivanna Solid Waste Authority - B Rivanna Water & Sewer Authority - B Riverside Regional Jail - B Roanoke Higher Education Authority - C Roanoke Redevelopment & Housing Authority - A Roanoke River Service Authority - A Robert E. Lee Soil & Water Conservation District - A Rockbridge Area Community Services Board - B Rockbridge Area Social Services Department - B Rockbridge County Public Service Authority - B Rockbridge Regional Library - A Russell County Public Service

Continued

Authority - C

Authority - B

Scott County Public Service

#### AUTHORITIES, COMMISSIONS, DISTRICTS, REGIONAL INSTITUTIONS AND COMMUNITY SERVICES BOARDS, cont.

Scott County Redevelopment & Housing Authority - B Scott County Soil & Water Conservation District - B Shenandoah Valley Juvenile Detention Home Commission - C Shenandoah Valley Regional Airport Commission - B Skyline Soil & Water Conservation District - A South Central Wastewater Authority - B Southeastern Virginia Public Service Authority - B Southside Community Services Board - C Southside Planning District Commission - B Southside Regional Jail - C Southside Regional Juvenile Group Home Commission - B Southside Regional Library Board - B

Southwest Regional Recreation Authority - B Southwest Virginia Regional Jail - B Spotsylvania-Stafford-Fredericksburg Group Home Commission - B Staunton Redevelopment & Housing Authority - B Suffolk Redevelopment & Housing Authority - B Sussex Service Authority - B Tazewell Soil & Water Conservation District - B Thomas Jefferson Planning District Commission - B Thomas Jefferson Soil & Water Conservation District - B Tidewater Soil & Water Conservation District - A Tidewater Youth Services

Commission - C

Tri-County/City Soil & Water Conservation District - B Upper Occoquan Sewage Authority - B Valley Community Services Board - B Virginia Biotechnology Research Park Authority - C Virginia Coalfield Economic Development Authority - C Virginia Highlands Airport Commission - B Virginia Peninsula Regional Jail - B Virginia Peninsulas Public Service Authority - B Virginia Resources Authority - B Virginia's Region 2000 Local Government Council - B Washington County Service Authority - B

Washington Metropolitan Area Transportation Commission - A Waynesboro Redevelopment & Housing Authority - B Western Tidewater Community Services Board - D Western Tidewater Regional Jail - B Western Virginia Regional Jail Authority - C Western Virginia Water Authority - B Wise County Public Service Authority - B Wise County Redevelopment & Housing Authority - C Woodway Water Authority - B Wythe-Grayson Regional Library - B Wytheville Redevelopment & Housing Authority - B

#### **SCHOOLS: 144**

E- professional employees covered by retirement, group life insurance and the retiree health insurance credit and non-professional employees (as applicable) covered by retirement and group life insurance F - professional and non-professional employees covered by retirement, group life insurance and the retiree health insurance credit

#### COUNTY SCHOOLS: 94

Accomack County Schools - E Albemarle County Schools - E Alleghany County Schools - E Amelia County Schools - E Amherst County Schools - E Appomattox County Schools - F Arlington County Schools - E Augusta County Schools - E Bath County Schools - F Bedford County Schools - E Bland County Schools - E Botetourt County Schools - F Brunswick County Schools - F Buchanan County Schools - E Buckingham County Schools - E Campbell County Schools - F Caroline County Schools - E Carroll County Schools - F Charles City County Schools - E Charlotte County Schools - E Chesterfield County Schools - E

Clarke County Schools - E Craig County Schools - E Culpeper County Schools - F Cumberland County Schools - E Dickenson County Schools - E Dinwiddie County Schools - E Essex County Schools - E Fairfax County Schools - E Fauquier County Schools - E Floyd County Schools - E Fluvanna County Schools - E Franklin County Schools - F Frederick County Schools - E Giles County Schools - E Gloucester County Schools - F Goochland County Schools - E Grayson County Schools - E Greene County Schools - E Greensville County Schools - E Halifax County Schools - F Hanover County Schools - E

Henrico County Schools - E Henry County Schools - E Highland County Schools - E Isle of Wight County Schools - E King & Queen County Schools - E King George County Schools - E King William County Schools - E Lancaster County Schools - E Lee County Schools - F Loudoun County Schools - F Louisa County Schools - F Lunenburg County Schools - E Madison County Schools - E Mathews County Schools - E Mecklenburg County Schools - E Middlesex County Schools - E Montgomery County Schools - E Nelson County Schools - E New Kent County Schools - E Northampton County Schools - E Northumberland County Schools - E

Nottoway County Schools - E Orange County Schools - E Page County Schools - E Patrick County Schools - E Pittsylvania County Schools - E Powhatan County Schools - E Prince Edward County Schools - E Prince George County Schools - E Prince William County Schools - F Pulaski County Schools - E Rappahannock County Schools - F Richmond County Schools - E Roanoke County Schools - E Rockbridge County Schools - E Rockingham County Schools - F Russell County Schools - E Scott County Schools - E Shenandoah County Schools - E Smyth County Schools - E Southampton County Schools - E Spotsylvania County Schools - E

Continued

COUNTY SCHOOLS, cont.			
Stafford County Schools - F Surry County Schools - E Sussex County Schools - E	Tazewell County Schools - E Warren County Schools - E Washington County Schools - F	Westmoreland County Schools - E Wise County Schools - F	Wythe County Schools - F York County Schools - E
CITY AND TOWN SCHOOLS	: 39		
Alexandria City Schools - E Bristol City Schools - E Buena Vista City Schools - E Charlottesville Public Schools - E Chesapeake Public Schools - E Colonial Beach Schools - E Colonial Heights City Schools - E Covington City Schools - F Danville City Schools - E Fairfax City Schools - E	Falls Church Public Schools - E Franklin City Schools - F Fredericksburg City Schools - E Galax City Schools - E Hampton City Schools - E Harrisonburg City Schools - E Hopewell City Schools - E Lexington City Schools - E Lynchburg Public Schools - E Manassas City Schools - F	Manassas Park City Schools - F Martinsville City Schools - E Newport News Public Schools - E Norfolk Public Schools - E Norton City Schools - E Petersburg City Schools - E Poquoson City Schools - F Portsmouth City Schools - E Radford City Schools - E Richmond Public Schools - E	Roanoke City Schools - F Salem City Schools - F Staunton City Schools - F Suffolk City Schools - E Virginia Beach City Schools - E Waynesboro City Schools - E West Point Schools - E Williamsburg-James City County Schools - F Winchester Public Schools - F
OTHER SCHOOLS: 11			
Amelia-Nottoway Vocational Center - E Appomattox Regional Governor's School - E Charlottesville-Albemarle Vocational Technical Center - E	Jackson River Vocational Technical Center - F Maggie Walker Governor's School for Government and International Studies - E	New Horizons Technical Center - E Northern Neck Regional Special Education Program - E Northern Neck Regional Vocational Center - E	Rowanty Vocational Technical Center - E The Pruden Center for Industry and Technology - E Valley Vocational Technical Center - E

Of the 144 school boards, 134 also provide coverage for non-professional employees and are treated as political subdivisions.

### AGENCIES OF THE COMMONWEALTH OF VIRGINIA, INCLUDING PUBLIC COLLEGES AND UNIVERSITIES: 236

Covered by retirement, group life insurance, retiree health insurance credit, and sickness and disability

**TOTAL VRS-PARTICIPATING EMPLOYERS: 834** 

#### FIGURE 5.13 - VRS EMPLOYER RANKING

#### **CURRENT YEAR**

AS OF JUNE 30, 2012

Active Employees	Percentage of Total	
20,592	6.02%	
8,295	2.43%	
7,864	2.30%	
7,523	2.20%	
5,938	1.74%	
5,923	1.73%	
5,283	1.55%	
5,117	1.50%	
4,886	1.43%	
4,718	1.38%	
265,687	77.72%	
341,826	100.00%	
	Employees  20,592 8,295 7,864 7,523 5,938 5,923 5,923 5,283 5,117 4,886 4,718 265,687	

#### HISTORICAL COMPARISON

AS OF JUNE 30, 2005\*

Employer	Active Employees	Percentage of Total
1. Fairfax County Schools - Professional Employees	18,821	5.81%
2. Virginia Beach City Schools - Professional Employees	8,401	2.59%
3. Prince William County Schools - Professional Employees	6,558	2.02%
4. Chesterfield County Schools - Professional Employees	5,660	1.75%
5. City of Virginia Beach - General Government	5,655	1.75%
6. University of Virginia - Academic Division	5,248	1.62%
7. Loudoun County Schools - Professional Employees	5,163	1.59%
8. Norfolk City Schools - Professional Employees	4,960	1.53%
9. Henrico County - General Government	4,526	1.40%
10. Virginia Polytechnic Institute and State University - Academic	4,493	1.39%
11. All Others	254,540	78.55%_
Total	324,025	100.00%

<sup>\*</sup>Fiscal year 2005 is the earliest year for which comparative information exists to support this detailed presentation by specific employer.

# Commonwealth of Virginia 457 Deferred Compensation and Cash Match Plans Program with Oversight by VRS

#### PLAN OVERVIEW

The Commonwealth of Virginia 457 Deferred Compensation Plan is qualified under Section 457(b) of the Internal Revenue Code and regulated by Title 51.1, Chapter 6, of the *Code of Virginia*. The Deferred Compensation Plan provides eligible members a way to save for retirement through deferrals of compensation each pay period.

The Cash Match Plan is qualified under Section 401(a) of the Internal Revenue Code and is regulated by Title 51.1, Chapter 6, of the *Code of* 

Virginia. Employees participating in the Deferred Compensation Plan are eligible to receive an employer-provided contribution to the Cash Match Plan if they are state employees or employees whose employers have elected the Cash Match Plan.

The Virginia Retirement System (the System) has oversight but no investment responsibility for the Deferred Compensation and Cash Match Plans. These plans' assets, therefore, are not included in the System's Basic Financial Statements.

#### FIGURE 5.14 - STATEMENT OF CHANGES IN PLAN ACCUMULATION ASSETS

FOR THE YEARS ENDED JUNE 30

	Deferred Compensation Plan - 457(b)		Cash Match Plan - 401(a)	
	2012	2011	2012	2011
Plan Assets on July 1	\$ 1,435,314,284	\$ 1,170,879,848	\$ 236,515,555	\$ 194,558,168
Contributions	122,471,456	124,262,495	17,052,149	10,166,265
Distributions	(72,186,519)	(68,806,648)	(15,392,026)	(12,330,319)
Plan Transfers*	352,360	381,635	13,868,950	13,749,669
Third Party Administrative Fees**	(2,214,950)	(2,127,903)	(407,359)	(376,101)
Period Earnings	44,496,349	210,724,857	7,974,374	30,747,873
Plan Assets on June 30	\$ 1,528,232,980	\$ 1,435,314,284	\$ 259,611,643	\$ 236,515,555

\*For the Deferred Compensation Plan, this represents plan transfers from other eligible Section 457(b) plans into the Commonwealth's Plan. For the Cash Match Plan, this represents transfers from other qualified plans, including Partial Lump-Sum Option Payments (PLOPs) for the VRS pension plans.

\*\*The current third-party administrator, ING Institutional Plan Services (ING), is compensated based on an annual recordkeeping and communication fee of 18 basis points (0.18%) capped at combined account balances of \$130,000. In addition, administrative costs are incurred by VRS for each of the plans. For the Deferred Compensation Plan, they were in \$604,457 and \$531,280 in fiscal year 2012 and fiscal year 2011, respectively. For the Cash Match Plan, they were in \$390,095 and \$243,803 in fiscal year 2012 and fiscal year 2011, respectively. These costs are funded by the employers participating in the plans.

#### **ELIGIBILITY**

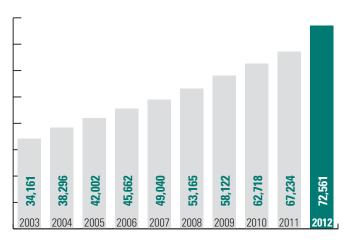
New and re-hired salaried state employees are automatically enrolled in the Deferred Compensation Plan upon employment with two opportunities to opt out of the plan. The Deferred Compensation Plan is voluntary to salaried state employees hired before January 1, 2008 and to eligible political subdivision employees whose employers have elected to participate in the plan. Wage employees of employers that offer the plans may participate in the Deferred Compensation Plan but not the Cash Match Plan.

Figure 5.14 presents details of each plan's activity for the years ended June 30, 2012 and 2011. Contributions to the Deferred Compensation Plan during FY 2012 and FY 2011 were \$122,471,456 and \$124,262,495, respectively. Contributions to the Cash Match Plan during FY 2012 and FY 2011 were \$17,052,149 and \$10,166,265, respectively.

As shown in Figures 5.15 and 5.16, there were approximately 72,561 employees in the Deferred Compensation Plan and 67,842 employees in the Cash Match Plan as of June 30, 2012.

FIGURE 5.15 – 457(B) ACTIVE AND INACTIVE PLAN PARTICIPANTS

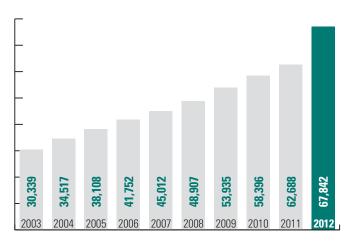
AT JUNE 30



Current state legislation establishing the Deferred Compensation Plan allows participants to use plan funds to purchase eligible prior service credit in their defined benefit plan. Approximately 112 plan participants used the trustee-to-trustee transfer provision to buy VRS service credit.

# FIGURE 5.16 – 401(A) ACTIVE AND INACTIVE PLAN PARTICIPANTS

AT JUNE 30



## FIGURE 5.17 – TOTAL PARTICIPANT ACCOUNTS IN EACH FUND OPTION

AT JUNE 30, 2012

	<b>Deferred Compensation</b>	Cash Match
Fund Name	Plan - 457(b)	Plan - 401(a)
Income & Growth Fund	8,431	6,699
Balanced Growth Fund	31,015	26,668
Long-Term Growth Fund	10,180	8,846
Bond Index Fund	7,356	5,510
S&P 500 Index Fund	21,217	18,814
Russell 1000 Value Index Fund	7,240	5,614
Russell 1000 Growth Index Fund	5,535	4,114
Russell 3000 Index Fund	3,105	2,165
Small/Mid Cap Equity Index Fund	12,858	10,493
International Equity Index Fund	9,641	7,644
Real Estate Investment Trust Index Fund	8,715	6,861
Money Market Fund	4,891	3,910
Active Inflation-Protected Bond Fund	4,623	3,153
Active Bond Fund	6,680	4,918
Active High-Yield Bond Fund	4,162	2,836
Active Global Equity Fund	5,480	4,111
Stable Value Fund	22,044	22,763
VRS Investment Portfolio	1,394	876
Self-Directed Brokerage	242	27

The number of participant accounts exceeds the number of participants as a participant may invest in more than one fund.



#### FIGURE 5.18 – ACCUMULATION PLAN ASSETS BY FUND

FOR THE YEARS ENDED JUNE 30

	Deferred Compen	sation Plan - 457(b)	Cash Match Plan - 401(a)		
	2012	2011	2012	2011	
Income & Growth Fund	\$ 46,241,819	\$ 37,957,124	\$ 9,321,694	\$ 7,435,371	
Balanced Growth Fund	157,799,349	143,536,553	27,887,002	22,285,229	
Long-Term Growth Fund	63,807,724	58,378,593	13,618,783	12,919,624	
VRS Investment Portfolio Interim Account	927,125	458,953	1,751,981	33,918	
Bond Index Fund	66,783,184	57,228,608	7,973,699	6,825,991	
S&P 500 Index Fund	287,394,448	276,682,240	45,125,725	42,767,233	
Russell 1000 Value Index Fund	58,280,319	56,328,745	6,839,631	6,381,531	
Russell 1000 Growth Index Fund	37,412,335	33,199,775	4,802,491	4,337,766	
Russell 3000 Index Fund	17,902,201	16,228,616	1,867,019	1,744,614	
Small/Mid Cap Equity Index Fund	120,351,622	127,224,233	15,977,321	16,199,431	
International Equity Index Fund	55,996,072	65,868,873	6,780,982	7,790,452	
Real Estate Investment Trust Index Fund	61,540,669	49,622,680	9,350,762	7,406,225	
Money Market Fund	35,691,986	32,646,827	5,724,674	5,317,891	
Active Inflation-Protected Bond Fund	40,712,394	29,017,387	4,272,643	2,777,760	
Active Bond Fund	40,253,139	37,826,670	5,843,305	5,346,306	
Active High-Yield Bond Fund	16,142,738	13,162,974	1,960,108	1,650,137	
Active Global Equity Fund	28,529,586	31,696,754	3,495,517	3,706,644	
Stable Value Fund (Galliard)	369,200,040	349,600,593	85,135,371	80,039,032	
VRS Investment Portfolio	8,292,675	6,343,787	1,503,923	1,405,118	
Self-Directed Brokerage	14,973,555	12,304,299	379,012	145,282	
<b>Total Accumulation Plan Assets</b>	\$ 1,528,232,980	\$ 1,435,314,284	\$ 259,611,643	\$ 236,515,555	

# **Description of Plan Funds**

AS OF JUNE 30, 2012

The Commonwealth of Virginia 457 Deferred Compensation and Cash Match Plans offer the following core investment options to plan participants.

#### TIER I: PASSIVELY MANAGED ASSET ALLOCATION FUNDS

**Income & Growth Fund:** Seeks to provide income and a modest level of capital growth by investing in a combination of bonds and stocks, which is anticipated to provide long-term total returns that are slightly higher than inflation with the possibility of occasional short-term losses.

U.S. Bonds-75.0% U.S. Stocks-22.0% Foreign Stocks-3.0%

**Balanced Growth Fund:** Seeks to provide income and a modest level of capital growth by investing in a combination of bonds and stocks, which is anticipated to provide long-term total returns that are higher than inflation with the possibility of short-term losses.

U.S. Bonds-50.0% U.S. Stocks-43.0% Foreign Stocks-7.0%

**Long-Term Growth Fund:** Seeks to provide capital growth by investing in a combination of bonds and stocks, which is anticipated to provide long-term total returns that are higher than inflation with the possibility of significant short-term losses.

U.S. Stocks-64.0% U.S. Bonds-25.0% Foreign Stocks-11.0%

**VRS Investment Portfolio – Interim Account:** Seeks to provide a daily valued investment account, using the Long-Term Growth Fund as described above, where contributions and investment transfers are held until invested in the Virginia Retirement System Investment Portfolio (VRSIP).

U.S. Stocks-64.0% U.S. Bonds-25.0% Foreign Stocks-11.0%

#### TIER II: PASSIVELY MANAGED FUNDS

**Bond Index Fund:** Seeks to track the total return performance of the Barclays Capital Aggregate Bond Index. This Index is an unmanaged index considered indicative of the broad domestic bond market in general and consists of government, corporate, mortgage-backed and asset-backed securities.

Treasury-35.8% Mortgage-Backed Securities-30.0% Industrial-11.4% Finance-6.6% Non-Corporates-5.5% Agency-5.1% Utility-2.3% CMBS-1.8% Cash-0.8% Other-0.5% Asset-Backed Securities-0.2%

**S&P 500 Index Fund:** Seeks to track the performance of the Standard & Poor's 500 Index. This Index is an unmanaged index considered indicative of the large capitalization domestic stock market in general and is comprised of 500 widely held U.S. stocks chosen by Standard & Poor's.

```
Information Technology-19.8% Financials-14.4% Health Care-12.0% Consumer Staples-11.3% Consumer Discretionary-11.0% Energy-10.8% Industrials-10.4% Utilities-3.7% Materials-3.4% Telecommunications Services-3.2%
```

**Russell 1000 Value Index Fund:** Seeks to track the performance of the Russell 1000 Value Index. This Index is an unmanaged index considered indicative of the value-oriented domestic stock market in general and is comprised of stocks in the Russell 1000 that have lower price-to-book ratios and lower forecasted growth values.

```
Financials-26.1% Energy-16.5% Health Care-11.8% Industrials-9.2% Consumer Discretionary-7.6% Utilities-7.3% Consumer Staples-7.2% Information Technology-6.7% Materials-3.9% Telecommunication Services-3.7%
```

**Russell 1000 Growth Index Fund:** Seeks to track the performance of the Russell 1000 Growth Index. This Index is comprised of stocks in the Russell 1000 that have higher price-to-book ratios and higher forecasted growth values.

```
Information Technology-31.7% Consumer Discretionary-16.2% Consumer Staples-13.2% Industrials-12.4% Health Care-11.9% Financials-4.5% Materials-3.9% Energy-3.7% Telecommunication Services-2.3% Utilities-0.2%
```

**Russell 3000 Index Fund:** Seeks to track the performance of the Russell 3000 Index. This Index is an unmanaged index considered indicative of the broad domestic stock market in general and is comprised of the 3,000 largest stocks in the U.S. market and accounts for approximately 98% of the investable U.S stock market.

```
Information Technology-18.9% Financials-15.7% Consumer Discretionary-12.2% Health Care-12.0% Industrials-11.1% Energy-9.8% Consumer Staples-9.7% Materials-4.0% Utilities-3.8% Telecommunication Services-2.8%
```

**Small/Mid Capitalization Equity Index Fund:** Seeks to track the performance of the Russell Small Capitalization Completeness Index. This Index is an unmanaged index considered indicative of the small to mid-capitalization sector of the U.S. Stock Market in general.

```
Financials-22.4% Consumer Discretionary-16.2% Information Technology-15.7% Industrials-14.4% Health Care-11.5% Materials-6.1% Energy-5.6% Utilities-3.8% Consumer Staples-3.3% Telecommunication Services-1.0%
```

International Equity Index Fund: Seeks to track the performance of the Morgan Stanley Capital International Europe, Australasia, Far East Index (MSCI EAFE). This Index is an unmanaged index considered indicative of the broad foreign stock market in general and is comprised of stocks in 21 countries in Europe and the Pacific Basin.

```
Financials-22.4% Industrials-12.5% Consumer Staples-12.0% Consumer Discretionary-10.5% Health Care-10.1% Materials-9.6% Energy-8.4% Telecommunication Services-5.7% Information Technology-4.5% Utilities-4.3%
```

**Real Estate Investment Trust Index Fund:** Seeks to track the performance of the Dow Jones U.S. Select REIT Index. This Index is a market capitalization weighted index of publicly traded Real Estate Investment Trusts (REITs).

```
Retail Malls-17.8% Apartments-17.6% Health Care-14.3% Office-11.8%

Retail Strip Centers-7.6% Industrial-7.5% Storage-6.7% Hotels-5.9% Diversified-5.1%

Industrial Mixed-3.9% Manufactured Homes-1.0% Factory Outlets-0.8%
```

#### TIER III: ACTIVELY MANAGED FUNDS

**Money Market Fund:** Seeks to provide safety of principal, daily liquidity and a competitive yield by investing in high-quality money market instruments.

```
U.S. Agency Repurchase Agreements-39.6% U.S. Agency Debt-37.5% U.S. Government Repurchase Agreements-19.2% U.S. Government Debt-3.7%
```

**Active Inflation-Protected Bond Fund:** Seeks to provide inflation protection and income consistent with investment in inflation-indexed securities.

```
U.S Treasury/Agency-98.8% Other-1.2%
```

**Active Bond Fund:** Seeks to provide maximum total return, consistent with preservation of capital and prudent investment management by investing in a diversified portfolio of primarily high-quality bonds, which is actively managed to maximize return in a risk controlled framework.

```
Mortgage-52.0% U.S Treasury/Agency-38.0% Investment Grade Credit-13.0% Emerging Markets-8.0% Non-U.S. Developed-5.0% Municipal-4.0% High Yield Credit-3.0% Other-1.0% Swaps and Liquid Rates-(3.0%) Money Market and Net Cash-(21.0%)
```

**Active High-Yield Bond Fund:** Seeks to provide a high level of current income which exceeds the performance of the custom benchmark consisting of 95% Barclays Capital High-Yield ex-CCC Index and 5% Barclays Capital 1-3 Year Treasury Index.

```
Finance-17.4% Communication-17.0% Consumer Non-Cyclical-12.1% Consumer Cyclical-10.6% Technology-8.6% Basic Industry-8.3% Utilities-8.1% Capital Goods-7.9% Energy-6.9% Treasury/Agency-1.9% Transportation-1.2%
```

**Active Global Equity Fund**: Seeks to provide long-term growth of capital with current income, which exceeds the performance of the MSCI World Index. This Index is a measure of the global developed market in general.

```
Geographic Breakdown: Europe-37.5% United States-36.3% Asia & Pacific Basin-16.6% Cash & Equivalents-6.3% Other (Including Canada and Latin America)-3.3%
```

**Stable Value Fund:** Seeks to provide safety of principal while earning a reasonable level of interest income consistent with an underlying portfolio of short to intermediate duration high-quality fixed-income (bond) securities and liquidity to accommodate participant transactions.

Security-Backed Contracts (Wrap Providers): JP Morgan Chase Bank-22.2%

State Street Bank and Trust-20.4% Royal Bank of Canada-16.0% ING Life Insurance and Annuity Co.-15.9%

Stable Value Funds: Wells Fargo Stable Return Fund-25.5%

**VRS Investment Portfolio**: Seeks to maximize return while managing risk within an acceptable range. Due to the long-term nature of the defined benefit plan's liabilities, the horizon for investment decisions is generally defined as 10 years or longer.

```
Fixed Income-22.0% Domestic Equity-20.1% Non-U.S. Equity (Dev)-15.7% Credit Strategies-9.6% Private Equity-9.1% Emerging Markets-7.1% Private Real Estate-7.0% Convertibles-4.0% Emerging Market Debt-3.8% Public Real Estate-1.2% Cash-0.4%
```

#### TIER IV: SELF-DIRECTED BROKERAGE OPTION

The Self-Directed Brokerage Account (SDBA) allows investors to select from thousands of publicly traded mutual funds, exchange-traded funds (ETFs) and individual stocks and bonds in addition to the core investment options in Tier I, Tier II and Tier III. The SDBA option is offered through TD Ameritrade, a division of Ameritrade, Inc. The SDBA option is for knowledgeable investors who acknowledge and understand the risks and costs associated with the investments contained in this option. In addition to the annual recordkeeping and communication services fee, there is a plan fee of \$12.50 per quarter, as well as transaction fees charged by TD Ameritrade and investment management-related fees and expenses for the funds or investments selected.

# Investment Option Performance Summary FOR THE PERIOD ENDING JUNE 30, 2012

#### TIER I: PASSIVELY MANAGED ASSET ALLOCATION FUNDS

Investment Options	1 Voor	2 Vaara	E Voore	Expense
Investment Options	1 Year	3 Years	5 Years	Ratio
Income & Growth Fund	6.40%	9.36%	5.55%	0.06%
Benchmark (75% Barclays Capital Aggregate Bond, 22% Russell 3000, 3% MSCI EAFE indices)	6.37%	9.33%	5.36%	
Balanced Growth Fund	4.90%	11.48%	3.80%	0.06%
Benchmark (50% Barclays Capital Aggregate Bond, 43% Russell 3000, 7% MSCI EAFE indices)		4.83%	11.44%	3.63%
Long-Term Growth Fund	3.18%	13.43%	1.86%	0.06%
VRS Investment Portfolio Interim Account	3.18%	13.43%	1.86%	0.06%
Benchmark (25% Barclays Capital Aggregate Bond, 64% Russell 3000, 11% MSCI EAFE indices)	3.05%	13.38%	1.65%	
TIER II:	PASSIVELY MANAG	ED FUNDS		
Investment Options	1 Year	3 Years	5 Years	Expense Ratio
Bond Index Fund	7.42%	6.93%	6.88%	0.06%
Barclays Capital Aggregate Bond Index	7.47%	6.93%	6.79%	
S&P 500 Index Fund	5.45%	16.42%	0.28%	0.02%
S&P 500 Index	5.45%	16.42%	0.28%	
Russell 1000 Value Index Fund	2.93%	15.79%	-2.16%	0.09%
Russell 1000 Value Index	3.01%	15.80%	-2.19%	
Russell 1000 Growth Index Fund	5.70%	17.39%	2.82%	0.08%
Russell 1000 Growth Index	5.76%	17.50%	2.87%	
Russell 3000 Index Fund	3.85%	16.72%	0.51%	0.07%
Russell 3000 Index	3.84%	16.73%	0.39%	
Small/Mid Cap Equity Index Fund	-2.65%	18.62%	1.39%	0.07%
Russell Small Cap Completeness Index	-2.68%	18.58%	1.25%	
International Equity Index Fund	-13.28%	6.24%	-5.85%	0.14%
MSCI EAFE Index	-13.83%	5.96%	-6.10%	
Real Estate Investment Trust Index Fund	13.06%	33.05%	1.73%	0.16%
Dow Jones U.S. Select REIT Index	13.29%	33.52%	1.97%	

### INVESTMENT OPTION PERFORMANCE SUMMARY, cont.

#### TIER III: ACTIVELY MANAGED FUNDS

			Expense
1 Year	3 Years	5 Years	Ratio
0.17%	0.21%	1.22%	0.10%
0.07%	0.14%	1.05%	
11.95%	9.62%	8.25%	0.07%
11.66%	9.63%	8.44%	
6.96%	8.68%	9.22%	0.46%
7.47%	6.93%	6.79%	
8.97%	14.35%	7.21%	0.13%
7.81%	13.89%	7.69%	
-5.63%	9.99%	-1.44%	0.50%
-4.98%	10.97%	-2.96%	
2.55%	2.74%	3.53%	0.27%
-1.82%	10.03%	0.21%	0.62%
-2.49%	11.04%	0.35%	
2.11%	12.53%	1.61%	
	0.07%  11.95% 11.66%  6.96% 7.47%  8.97% 7.81%  -5.63% -4.98%  2.55%	0.17%       0.21%         0.07%       0.14%         11.95%       9.62%         11.66%       9.63%         6.96%       8.68%         7.47%       6.93%         8.97%       14.35%         7.81%       13.89%         -5.63%       9.99%         -4.98%       10.97%         2.74%         -1.82%       10.03%         -2.49%       11.04%	0.17%       0.21%       1.22%         0.07%       0.14%       1.05%         11.95%       9.62%       8.25%         11.66%       9.63%       8.44%         6.96%       8.68%       9.22%         7.47%       6.93%       6.79%         8.97%       14.35%       7.21%         7.81%       13.89%       7.69%         -5.63%       9.99%       -1.44%         -4.98%       10.97%       -2.96%         2.55%       2.74%       3.53%         -1.82%       10.03%       0.21%         -2.49%       11.04%       0.35%

<sup>\*</sup>VRSIP and benchmark performance returns are reported with a one month lag. Information is as of May 31, 2012.





## **Virginia Retirement System**