



**JOINT LEGISLATIVE AUDIT  
& REVIEW COMMISSION**  
OF THE VIRGINIA GENERAL ASSEMBLY

**VRS Biennial Status and  
Semi-Annual Investment Report  
December 2008**

Introduction..... Page 2  
 December 2008 Semi-Annual Investment Report ..... Page 2  
 Recent VRS Legislation and Benefit Changes ..... Page 6  
 VRS Awards Multi-Year Contract for Modernization ..... Page 7  
 VRS Implements Wide Variety of New Initiatives ..... Page 8  
 Review of VRS’ Actuarial Valuations and Benefit Funding ..... Page 10  
 VRS Cash Flow, Funded Status, and Contribution Rates ..... Page 13  
 Recent Market Conditions Affect Administrative Operations ..... Page 14

<b>Profile: Virginia Retirement System Investments (as of September 30, 2008)</b>						
Market Value of Assets: \$49.3 billion						
<b>Number of External Managers:</b>						
Public Equity – 43 (22 traditional, 21 hedge funds, 19 are active)						
Fixed Income – 9						
<b>Number of External Investment Accounts:</b>						
Public Equity – 49 (27 traditional, 22 hedge funds, 20 are active)						
Fixed Income – 13 (12 traditional, 1 hedge fund)						
<b>Number of VRS Investment Department Staff:</b> 57 authorized FTEs (12 vacant)						
<b>FY 2008 Investment Expenses:</b> \$268.8 million (48.8 basis points)						
<b>FY 2008 Investment Department Operating Expenses:</b> \$12.3 million* (2.2 basis points)						
<b>Investment Policy Indicators (as of September 30, 2008)</b>						
<b>Asset Class</b>	<i>Asset Allocation</i> (% of Total Assets)		<i>Asset Allocation</i> (% of Asset Class)		<i>Type of Management</i> (% of Asset Class)	
	<b>Target</b>	<b>Actual</b>	<b>Domestic</b>	<b>Non-U.S.</b>	<b>External</b>	<b>VRS</b>
Public Equity**	52.6%	52.5%	61.1%	38.9%	75%	25%
Fixed Income**	20.0%	20.0%	95.2%	4.8%	68%	32%
Private Equity	≤ 10.0%	9.3%	67.9%	32.1%	100%	0%
Real Estate	≤ 10.0%	8.8%	87.0%	13.0%	95%	5%
Credit Strategies**	≤ 10.0%	9.1%	90.8%	9.2%	100%	0%
*Includes allocated administrative expenses						
**Figures include hedge funds						

## Introduction

The Virginia Retirement System (VRS) administers a defined benefit plan, a group life insurance plan, a deferred compensation plan and a cash match plan for Virginia's public sector employees, as well as an optional retirement plan for selected employees, the Virginia Sickness and Disability Program for State employees, and the long-term care plans.

VRS serves approximately 600,000 active members, retirees, and beneficiaries. As of June 30, 2008, the active employees include 147,149 teachers, 104,803 local government employees, and 93,785 State employees. VRS provides benefits to 136,394 retirees and beneficiaries. In addition, there are 118,350 inactive and deferred members. In FY 2008, VRS paid \$2.9 billion in benefits, refunds, insurance premiums and claims, health insurance credit reimbursements, and disability insurance premiums and benefits. The retirement system ranks as the nation's 24th largest public or private pension fund.

The Virginia Retirement System Oversight Act (Section 30-78 et seq. of the *Code of Virginia*) directs the Joint Legislative Audit and Review Commission (JLARC) to provide continuing oversight of VRS, including the preparation of biennial status and semi-annual investment reports. This report includes both the semi-annual investment report for December 2008 and the sixth biennial status report. The first section of the report provides an overview of each of the fund's asset classes and addresses the investment program. Subsequent sections of this report focus on recent legislation, VRS' modernization effort, benefit changes, the plans' actuarial valuations and benefit funding, and the impact of recent market conditions on cash flow, funded status, and administrative functions.

## December 2008 Semi-Annual Investment Report

This semi-annual investment report comes during a challenging and difficult market period, including declines in the housing and stock markets, sub-prime mortgage losses, tightening credit markets, and stress in both the economy and financial system. As a result of these extraordinary market conditions, the performance of the VRS pension fund ("the fund") and its various asset classes have experienced steep declines in value. This semi-annual investment report provides information about the fund's asset allocation and performance. In addition, the report provides an overview of each of the fund's five asset classes (public equity, fixed income, private equity, credit strategies, and real estate). The report also addresses VRS' exposure to hedge funds and credit default swaps, a topic that has recently received considerable media attention.

At the close of FY 2008, the market value of the fund was \$55.1 billion. As of September 30, 2008, the market value of the fund had declined to \$49.3 billion. Absolute performance for the total fund for the fiscal year to date and one-year periods ending September 30, 2008, were -10.1 percent and -16.3 percent, respectively. However, the fund's performance exceeded established benchmarks for the three-, five-, and ten-year periods ending September 30, 2008. Performance for the fiscal year to date and one-year periods ending September 30, 2008, lagged behind the benchmark. In addition, the fund did not achieve the assumed actuarial rate of return, 7.5 percent, in the fiscal year to date, or the one-, three-, and ten-year periods, but exceeded the actuarial rate of return in the five-year period. As noted, the data in this

investment report is as of September 30, 2008. Since that time, there has continued to be considerable volatility in the markets, and the value of the fund has been eroded by approximately 12 percent in October. Additional losses are expected for the month of November. Performance indicators are provided in Table 1.

<b>Table 1: VRS Investment Performance for Period Ending September 30, 2008</b>				
<b>Program/Performance Objective</b>	<b>Fiscal Year to Date</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>
<i>Total Fund</i>	-10.1%	-16.3%	3.5%	8.1%
Total Fund Benchmark –Intermediate	-8.8%	-16.0%	3.1%	7.5%
Total Fund Benchmark –Long Term	-6.1%	-14.2%	1.7%	5.3%
<i>Total Public Equity</i>	-16.2%	-26.3%	0.3%	7.4%
Public Equity Custom Benchmark	-13.8%	-24.9%	0.9%	7.5%
<i>Total Fixed Income</i>	-2.0%	1.3%	3.3%	3.5%
Lehman Total VRS Custom	-0.1%	4.5%	4.5%	4.0%
<i>Total Private Equity</i>	-0.3%	4.1%	21.6%	23.2%
Private Equity Custom Benchmark	-1.0%	-10.2%	7.2%	10.9%
<i>Total Real Estate</i>	-2.6%	-3.7%	13.5%	16.1%
Real Estate Custom Benchmark	0.1%	2.3%	13.7%	15.3%
<i>Total Credit Strategies</i>	-7.2%	-11.3%	1.4%	n/a
VRS Credit Strategies Custom	-12.2%	-15.8%	0.0%	n/a

Source: JLARC staff analysis of VRS data.

**Public Equity.** The public equity program continues to be VRS' largest asset class comprising 52.5 percent of the portfolio or \$25.9 billion. Non-U.S. public equities constitute 21.5 percent of the total portfolio or \$10.6 billion. The public equity program did not meet established benchmarks for the one-, three- and five-year periods ending September 30, 2008. Absolute performance was positive for the three- and five-year periods ending September 30, 2008 (0.3 percent and 7.4 percent, respectively), but the program experienced losses in the fiscal year to date and one-year periods (-16.2 percent and -26.3 percent, respectively).

**Fixed Income.** As of September 30, 2008, the fixed income program constituted 20 percent of the portfolio or \$9.9 billion. Approximately 95 percent of the assets in the fixed income program are invested domestically.

The program generated positive returns (1.3 percent, 3.3 percent, and 3.5 percent, respectively) for the one-, three-, and five-year periods ending September 30, 2008. However, the program did not meet its benchmark in any of these periods.

**Private Equity.** Private equity is an opportunistic substitute for public equity. Through active equity management, VRS expects to earn a meaningful return premium on its private equity investments.

As of September 30, 2008, private equity represented 9.3 percent of the total fund or \$4.6 billion. The private equity program outperformed its benchmark for the fiscal year to date as well as the one-, three-, and five-year periods ending September 30, 2008. While the double digit returns previously provided by the program have receded, the program continued to provide a premium over the public equity markets. For example, the one-year return for the private equity program was 4.1 percent compared to a benchmark return for the program of -10.2 percent. As reported in the July 2008 Semi-Annual Investment Report and after several years of favorable conditions for the private equity program, VRS does not expect the same

returns from the program as achieved during prior periods. Still, it anticipates that the program will achieve a meaningful premium over the public market. The private equity program's dollar-weighted return, since the inception of the program in April 1989 through June 30, 2008, was 23.6 percent.

**Credit Strategies.** VRS credit strategies include investments in areas such as public high yield debt, private debt, convertibles, bank loans, and high yield asset backed securities. The credit strategies program began July 1, 2004. As of September 30, 2008, the program had \$4.5 billion in assets and represented 9.1 percent of the total fund. In the current VRS portfolio, credit strategies are used opportunistically and are considered an alternative to the domestic equity market. While the VRS credit strategies program has outperformed the established benchmarks, it experienced losses of -11.3 percent over the one-year period and -7.2 percent for the fiscal year to date.

**Real Estate.** The total value of the real estate portfolio as of September 30, 2008, was \$4.3 billion or 8.8 percent of the total fund. Thirteen percent of the real estate program was invested internationally.

The VRS real estate program failed to meet its benchmark for the fiscal year to date, and for the one- and three-year periods. However, the program met or exceeded its benchmark for the five-year period ending September 30, 2008. Absolute performance was negative for the fiscal year to date and one-year periods (-2.6 percent and -3.7 percent, respectively).

**Hedge Funds.** While not considered a separate asset class, investments in hedge fund strategies constitute \$3.1 billion, or 6.3 percent of the total portfolio. These investments can cut across several asset classes, but most of the hedge fund managers are public equity managers (19 active managers). As of September 30, 2008, the credit strategies program had four hedge funds and fixed income had one hedge fund. Hedge fund performance was negative for the fiscal year to date and the one-year period (-13.1 percent and -13.0 percent, respectively), but was positive for the three- and five-year periods ending September 30, 2008 (5.0 percent and 7.3 percent, respectively). In addition, hedge funds outperformed their benchmarks for the one-, three-, and five-year periods ending September 30, 2008.

**VRS' Credit Default Swap (CDS) Exposure.** In recent weeks, there has been continuing media scrutiny of credit default swaps (CDS). This section provides a brief overview of these instruments as well as information about VRS' exposure to them.

A CDS is a derivative contract between two counterparties designed to transfer credit exposure relating to a particular issuer (or a portfolio of issuers). The buyer of a CDS purchases credit protection, while the seller of a CDS sells credit protection. The seller of the CDS must stand ready to make payments to the buyer if the issuer defaults on its debt obligations.

CDS contracts are typically used to either gain synthetic credit exposure to attractive debt investments (long exposure), or to hedge or reduce the risk of undesired credit exposures (short exposure). A long CDS position is typically used when it is judged to have better investment value than the underlying cash market debt obligations. Likewise, a short CDS position is typically used when it is judged to be a more efficient vehicle for reducing risk in an underlying security or reference portfolio.

At the end of September 2008, VRS estimated that it held CDS with a notional long exposure of approximately \$650 million and a notional short exposure of approximately \$300 million. The net long exposure of approximately \$350 million represented approximately 0.7 percent of total plan assets.

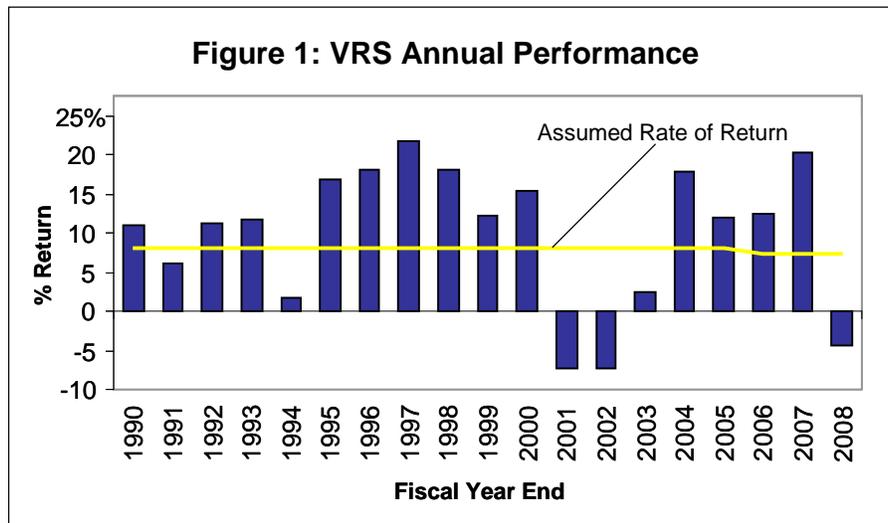
Currently, all VRS CDS positions are held within externally managed portfolios. VRS also employs CDS contracts from time to time within internally managed portfolios. It is common practice for CDS exposure to be collateralized, which significantly reduces counterparty exposure. Performance of CDS-related strategies to date has generally met expectations, with short CDS exposure producing gains and long CDS exposure performing in line with underlying reference obligations.

**Recent Investment Performance Has Resulted in VRS Fund Reductions.** The VRS portfolio finished FY 2008 (June 30, 2008) with a market value of \$55.1 billion. As of October 31, the market value had declined to about \$43.2 billion, a drop since June 30 of \$11.9 billion or slightly more than 20 percent. The largest declines in asset values were experienced in VRS holdings of U.S. and non-U.S. equities.

The VRS portfolio is invested for long-term returns as liabilities for current VRS members and retirees are estimated to come due over the next 85 years. VRS estimates that half of its future liabilities will not be due for at least another 21 years.

With a long-term approach to asset allocation, VRS does not attempt to time the market, and the portfolio is designed to withstand market volatility. VRS has experienced numerous down market cycles in the past, the most recent being the three-year period FY 2001-FY 2003. The fund bounced back strongly with double-digit returns in the four fiscal years that followed (FY 2004-FY 2007). In the past five fiscal years ended June 30, 2008, the VRS portfolio generated an 11.3 percent average annual rate of return. Notwithstanding these high historical returns, the Board lowered its long-term expected return assumption to 7.5 percent in May of 2005, reflecting an expectation that the fund would not be able to continue to generate the outsized returns previously achieved over the last two decades. This new assumption was incorporated into the June 30, 2005 actuarial valuation.

Annual investment returns for the 19-year period beginning in 1990 are provided in Figure 1 (next page). Figure 1 shows that in 1991, 1994, and from 2001 through 2003, the fund did not achieve the assumed eight percent actuarial rate of return. Beginning in FY 2006 as noted above, the assumed rate of return was lowered to 7.5 percent. In FY 2008, the fund returned -4.4 percent and thereby failed to achieve the assumed 7.5 percent actuarial rate of return. It should be noted that market downturns do not directly affect the amount of an employee's future defined benefit/pension because it is based on a formula rather than an account balance. However, these conditions do directly affect members' defined contribution account balances.



### Recent VRS Legislation and Benefit Changes

Changes to the benefits and programs administered by VRS since the last biennial status report in 2006 range in complexity from technical or relatively minor changes to modifications to some of the benefit structures. Substantive benefit changes enacted by the 2007 and 2008 General Assemblies are shown in Table 2.

<b>Table 2: Legislation Passed by the 2007 and 2008 General Assemblies</b>	
<b>2007 Legislative Session</b>	
<b>Bill Number</b>	<b>Description</b>
HB 1830	Changed participation in the deferred compensation plan for State employees hired or rehired on or after January 1, 2008, to an "opt-out" automatic enrollment plan rather than a voluntary "opt-in" plan.
HB 2370 & SB 1218	Increased the monthly health insurance credit to retired teachers from \$2.50 to \$4 per month for each full year of the retired member's creditable service. The benefit was applied to current and future retirees.
SB 789	Created trusts or equivalent arrangements to fund the costs of providing post-employment benefits (OPEBs) other than pensions for the Commonwealth and for counties, cities, towns, school divisions, and other political subdivisions. These are commonly called "OPEB Trusts."
SB 1166	Required localities to provide their deputy sheriffs enhanced coverage available to other political subdivision employees in hazardous duty positions enrolled in LEOS. It also increased the multiplier used in the calculation of benefits for State Police officers and VRS-covered sheriffs from 1.7 percent to 1.85 percent, with the option to localities to elect to provide all hazardous duty employees with the 1.85 percent multiplier.
<b>2008 Legislative Session</b>	
HB 774	Clarified the timeframe within which compulsory retirement for SPORS and local hazardous duty members shall occur by specifying that it be within 60 days of a member's reaching age 70 instead of "forthwith" after reaching 70.
HB 112	Clarified that "County Administrator" was among a category of employees who are eligible for a full retirement benefit at age 50 with 20 years of service upon involuntary termination.
SB 353	Transferred administration of voluntary employee-paid long-term care coverage programs for State employees, local government employees, local officers and teachers from the Department of Human Resource Management to VRS. The transfer occurred on November 1, 2008.

## VRS Awards Multi-Year Contract for Modernization

In June 2006, VRS received the approval of the VRS Board of Trustees to proceed with a six-year modernization program to update systems, business processes, and customer services through state-of-the-art technology. The objectives of the modernization effort are to provide customers near "24/7" access to VRS services; enhance timeliness, accuracy, and consistency of customer service; implement comprehensive knowledge and learning desktop tools; improve business process efficiency; and update outmoded technology systems.

Currently, most business processes at VRS are driven by aging legacy information systems that limit its ability to meet changing customer needs or to automate high-volume transactions. These systems are approaching obsolescence and are difficult to modify and maintain. In addition, while VRS has made significant progress over the past two years at allowing members and retirees to use self-service channels to obtain account information, VRS is not yet able to meet customer expectations for conducting transactions online. As the number of retirees has continued to grow at approximately five percent annually, VRS employment has had to grow in almost direct proportion to maintain service levels. VRS expects that modernization will allow the agency to reengineer outmoded business processes, automate manual tasks and create new self-service channels for members.

To that end, following an analysis of requirements and the development of a Request for Proposal to select a business partner, VRS recently entered into a contract with Sagitec Solutions, LLC to assist with modernization. Over the next four years, VRS will replace existing software systems with a Web-based solution. The new solution will be built on a platform that is easy to maintain, allowing for continuous improvement and expanded services.

VRS reports that customer service is the most important goal in modernization. Accordingly, the agency plans to implement systems with comprehensive self-service capabilities that use interview-based formats to remove the complexity from retirement transactions and ensure that members receive the benefits to which they are entitled. VRS also plans to implement a "no wrong door" approach to customer service, whereby members and retirees can access all of the services provided by VRS and third-party business partners through a single channel of their choice.

Work on the \$36.2 million, five-year contract will begin in January 2009. The first six months of the program will focus on business process reengineering. VRS plans to examine each of its business processes and identify opportunities for improvement. Design and development of the new solution will occur over the following three-plus years, in a series of manageable implementations. A one-year warranty will follow the final implementation, and the contract is expected to conclude in 2014.

The overall modernization budget is \$46.5 million. In addition to the \$36.2 million contract with Sagitec Solutions, VRS has budgeted for costs to be incurred for such expenses as backfilling positions assigned to the project, independent oversight of the project, and contingencies. To date, slightly more than \$800,000 has been spent on early improvement initiatives and business process reengineering.

## VRS Implements Wide Variety of New Initiatives

Since the last biennial status report in December 2006, VRS has undertaken a wide variety of new initiatives. These efforts include changing the administration of the Commonwealth's long-term care programs; providing auto enrollment in the State's 457 Deferred Compensation Plan; offering the Virginia Retirement System Investment Portfolio (VRSIP) investment option to defined contribution plan participants; hiring a new actuary, medical board, and third-party administrator for the defined contribution plans; establishing a Defined Contribution Plans Advisory Committee; and expanding the on-line *myVRS* self-service portal. These initiatives are designed to improve oversight and efficiency, enhance member services, and increase member choice.

***VRS Self-Insured the Long-Term Care Program and Realized Savings for Employers.*** VRS provides employer-paid long-term care insurance to about 73,000 members who are covered under the Virginia Sickness and Disability Program (VSDP). Coverage was originally provided on a fully insured basis through a group policy purchased from Aetna Insurance Company. Faced with escalating premiums and the prospect of Aetna dropping its group insurance business, VRS decided to self-insure the program, effective December 1, 2007. VRS obtained a return of insurance reserves from Aetna of \$21.1 million and placed these reserves in the VSDP fund. Actuaries from Milliman were engaged to conduct actuarial valuations both before and after the transfer from Aetna. Milliman's most recent actuarial valuation indicates that VRS is saving employers about \$1.5 million, or roughly 13 percent, annually compared to the former Aetna premium rates. VRS reports that it expended \$255,800 on outside actuarial valuations and benefit consulting and implemented this project \$44,000 under budget.

***The Transfer of Responsibility for the Voluntary Long-Term Care Program Brings Both Long-Term Care Programs Under a Single Agency.*** Senate Bill 353 (2008) transferred administration of voluntary employee paid long-term care coverage programs for State employees, employees of local governments, local officers and teachers from the Department of Human Resource Management (DHRM) to VRS. DHRM transferred administration to VRS on November 1, 2008. The transfer was the result of a joint study conducted by VRS and DHRM that concluded that long-term care coverage provided under the VSDP and the voluntary employee paid programs could be better integrated if administered by a single agency. To date, VRS reports expending \$96,000 for outside actuarial services and benefit consulting for this project.

***Following the Establishment of Automatic Enrollment, Few Employees Opted Out of the Deferred Compensation Plan.*** House Bill 1830 (2007) changed participation in the Commonwealth of Virginia 457 Deferred Compensation Plan for new State employees hired on or after January 1, 2008, to an "opt-out" plan rather than an "opt-in" plan. This is commonly referred to as "automatic enrollment." This approach to enrollment was proposed to the General Assembly as a joint effort between VRS and the Virginia Governmental Employees Association (VGEA). Virginia is now one of only three states with automatic enrollment programs for new employees.

The bill calls for a default contribution from new employees of \$20 per pay period matched with a \$10 contribution from employers. From January 1, 2008 through October 31, 2008, there were 7,723 new hires eligible for auto-enrollment in the 457 or 403(b) plans. Since January 1, 2008, 4,248 new State employees have completed the enrollment process and have been automatically enrolled in the 457

Plan or an equivalent 403(b) plan at the State colleges. Of the employees who have gone through the process, only 352 have opted out and another 1,357 self-enrolled by proactively choosing alternate deferral amounts and allocating contributions to their own selected funds.

**Addition of Virginia Retirement System Investment Portfolio (VRSIP) Provides DC Plan Participants With New Investment Option.** On July 1, 2008, VRS opened the Virginia Retirement System Investment Portfolio (VRSIP) as another investment option on the Great West Retirement Services platform available to defined contribution plan participants. Referred to as “unitization,” VRSIP allows participants to purchase unit shares in the VRS portfolio and obtain the same rates of return as the VRS Investment Department obtains on the pension portfolio. Participant funds are commingled with pension assets and invested in identical fashion. Transfers in and out of the VRSIP are restricted to once each quarter as shares are re-priced to reflect gains and losses from the prior quarter.

**Defined Contribution Plans Advisory Committee (DCPAC) Established to Provide Board With Additional Expertise.** The *Code of Virginia* allows the VRS Board of Trustees to establish advisory committees to assist in its work. In recognition of the rapid pace of new features and products being offered to defined contribution plan participants across the country, particularly in the private sector, the VRS Board established the Defined Contributions Plans Advisory Committee. The establishment of the DCPAC provided the Board with the benefit of the expertise available in the defined contribution plan industry.

The DCPAC is a seven-member committee charged with advising the Board on management and design of its defined contribution plans. The committee consists of two members of the Board and five other members chosen as follows:

- Two members with DC plan investment experience;
- Two members with DC plan administrative experience; and
- One member who chairs the Optional Retirement Plan Advisory Committee for Higher Education (ORPAC-HE).

Recently, the DCPAC has advised the Board on such topics as selection of a new DC plan record keeper, participants’ usage of the Self-Directed Brokerage Window, and the investment performance and services provided by recordkeeping firms and asset managers. The committee is currently reviewing the investment options available to participants and the feasibility of offering target date funds and investment advisory services to participants.

**The Selection of ING as the DC Plans Record Keeper Expected to Enhance Services and Reduce Fees.** Effective January 1, 2009, ING will take over as the record keeper for five VRS-administered DC plans. These plans have 55,000 participants with total assets of about \$1.2 billion. The Board chose ING to succeed the current record keeper, Great West Retirement Services, following a competitive selection process.

ING offered substantially lower fees and enhanced services to participants and employers. ING’s lower fee schedule is expected to save participants about \$900,000 annually. Conversion of accounts from the Great West system to ING is scheduled to take place between December 18, 2008, and January 5, 2009.

**New Consulting Actuary Hired.** VRS conducted a competitive procurement for actuarial services as its contract with Wachovia Retirement Services was nearing its

end. The VRS Board of Trustees selected Cavanaugh MacDonald Consulting (CMC) from Kennesaw, Georgia, as the new consulting actuary effective January 1, 2008. Tom Cavanaugh and Jose Fernandez are the principal actuaries assigned to perform VRS work.

***New Medical Board Hired to Conduct Disability Determination.*** The VRS Medical Board reviews and approves disability claims for VRS members who are not participants in VSDP. United Medical Review Services was selected to perform disability review services for VRS because of its rigorous and thorough process for examining medical records. While its services cost more than the previous Medical Board's, United uses a more thorough review process for determining eligibility for disability benefits.

***Expansion of the myVRS Application Enhances Online Access to Retirement Information for Active Members, Employers, and Retirees.*** Three new applications have been added to *myVRS*, the secure online self-service portal for VRS members, retirees and employers. *myVRS* for members was built in 2006 and has since gained 100,000 users. Its most popular feature is the online benefit estimator. Since inception, *myVRS* users have logged in to perform 323,476 benefit estimates.

Recently, VRS enhanced *myVRS* with a new retirement planner for members. The planner provides a consolidated view of retirement income and expenses by combining VRS benefit estimates with estimates of Social Security income, health insurance credits, income from DC plans, and estimated costs of State and federal tax withholdings, retiree health insurance and Medicare premiums. So far, members have produced 28,000 retirement plans in *myVRS*.

In February 2007, a new application called *myVRS* for Employers was released to provide human resource officers at State and local VRS-participating employers online self-service functions similar to those used by their employees. Since inception, 1,178 employer contacts have used *myVRS* for Employers to counsel employees, including the creation of 94,919 retirement estimates.

In June 2008, retirees were given access to their account information online through *myVRS* for Retirees. Retirees can view their current and previous monthly VRS benefit payments, tax withholdings, premium deductions, health insurance credits, cost of living adjustments and direct deposit banking information. Since this summer, 7,958 retirees have established *myVRS* accounts. A new tax withholding calculator for retirees will be added in January 2009.

## **Review of VRS' Actuarial Valuations and Benefit Funding**

VRS pension benefits are funded through a combination of member contributions, employer contributions, and investment income. The member contribution rate is fixed by the *Code of Virginia* at five percent of salary. The State, as well as most of its political subdivisions, pays the member contribution for its employees. The employer contribution rate is calculated by the VRS actuary at least every two years during the valuation process and typically varies over time in response to a number of assumptions and other factors. Separate employer contribution rates are calculated for the plans of State employees, teachers, State Police, other Virginia law officers, and judges. Each political subdivision has its own unique employer contribution rate. In addition, valuations are conducted and rates are calculated for the health insurance credit program, group life insurance program, and VSDP.

To achieve the VRS Board's goal of being fully funded, every two years the VRS actuary calculates the amount of funds the State should contribute to the retirement plans to pay for (1) the cost of benefits accrued by employees in that year and (2) the amount of liabilities from previously accrued benefits. This is called the Annual Required Contribution (ARC). The VRS Board must certify these rates, and in most cases it has certified the rates recommended by the actuary. The VRS Board-certified rates become the official rates that are cited in the Commonwealth's Annual Financial Report. Each year, the Governor and General Assembly allocate funds to cover the Board-certified rates, or some portion thereof.

There is no statutory requirement that the ARC be funded in a given year. However, the Governmental Accounting Standards Board (GASB) recommends that pension plan sponsors fully pay the ARC each year to ensure that the plan will eventually accrue enough assets to pay for its total liabilities. Compliance with GASB recommendations is one factor considered by bond rating agencies when issuing bond ratings.

In recent years, the State has not fully funded the ARC. Table 3 displays the certified rates calculated by the VRS actuary and the rates actually funded for the State, Teacher, SPORS, VaLORS, and Judicial plans. As shown in Table 3, the rates approved by the 2008 General Assembly (for FY 2009 and FY 2010) were less than those certified by the VRS Board of Trustees (2007 valuation rates). If the trend of paying less than the ARC continues, the resulting decline in funded ratios will require future generations of taxpayers to bear an increasing portion of the liabilities associated with providing retirement benefits to current employees. These liabilities manifest themselves in the form of a higher ARC in years to come.

<b>Table 3: Employer Contribution Rates for FY 2009 and FY 2010</b>		
	<b>2007 Valuation Rates Calculated and Certified</b>	<b>Rates Funded for 2009 &amp; 2010</b>
<b>State</b>	8.02%	6.23%
<b>Teachers</b>	11.84%	8.81%
<b>SPORS</b>	24.09%	20.05%
<b>VaLORS</b>	16.78%	14.23%
<b>Judicial</b>	38.04%	34.51%

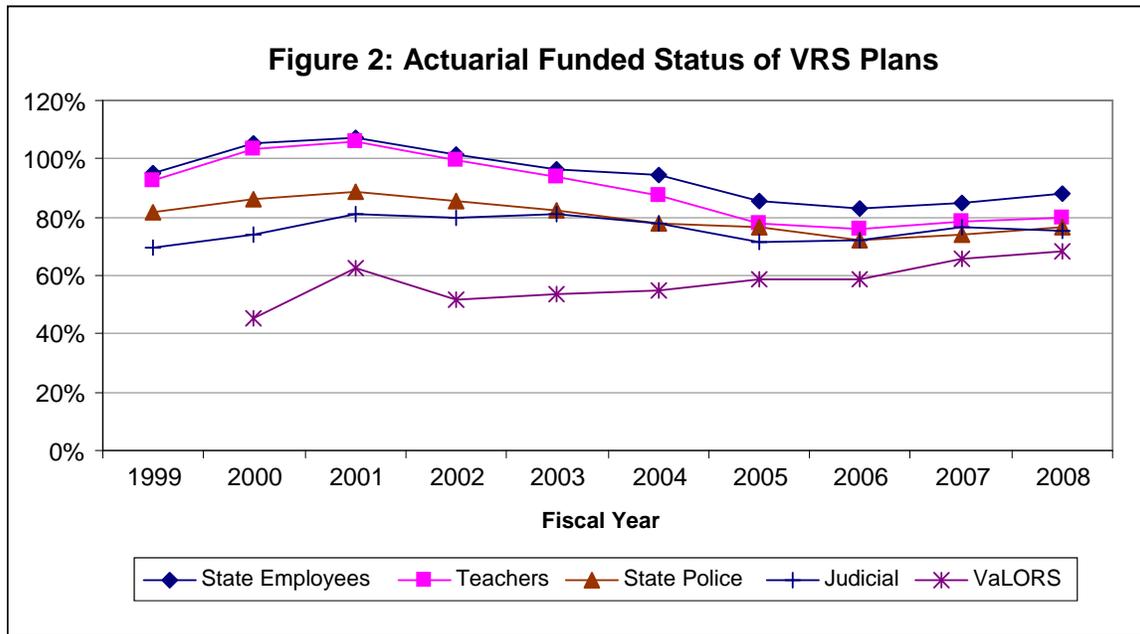
The 2008 valuation results are not binding and are generally for information or planning purposes, because the official Board-certified rates are based upon valuations conducted in the odd years and apply across the biennium. However, the valuations conducted in these off-years provide valuable information concerning the magnitude and direction of any potential rate changes and can assist decision makers with budgeting and resource allocation decisions. The major assumptions used in the valuation have not changed since 2005.

In addition to the valuations for the State, Teacher, SPORS, VaLORS, Judicial and political subdivision plans, valuations are performed for the health insurance credit, group life, and Virginia Sickness and Disability Plan. Table 4 displays calculated contribution rates resulting from valuations performed as of June 30, 2007 and June 30, 2008. As shown in the table, rates are lower in 2008 than in 2007 for all programs except the Teachers and Judicial plans.

<b>Table 4: Contribution Rates for State Employee and Teacher Plans</b>		
<b>Plan</b>	<b>Calculated Employer Contribution Rates 2007</b>	<b>Calculated Employer Contribution Rates 2008</b>
<b>State Employees</b>	8.02%	7.09%
<b>Teachers</b>	11.84%	11.96%
<b>State Police (SPORS)</b>	24.09%	22.46%
<b>VaLORS</b>	16.78%	16.70%
<b>Judicial (JRS)</b>	38.04%	41.78%
<b>Health Insurance Credit– State Employees</b>	1.22%	1.06%
<b>Health Insurance Credit– Teachers</b>	1.12%	1.09%
<b>Virginia Sickness and Disabil- ity Plan (includes long-term care coverage)</b>	1.96%	1.11%
<b>Group Life</b>	0.89%	0.86%

During the valuation process, the actuary calculates an asset liability ratio. This ratio, known as the funded status of a plan, is a typical measure of the health of a fund, and it measures the percentage of assets available to pay the present value of all future liabilities. As shown in Figure 2 (next page), with the exception of the judicial plan, the actuarial funded status of the plans improved from 2007 to 2008. The improvement in funded status occurred despite returns for the total fund of -4.4 percent in 2008. The asset liability ratios did not immediately decline, in large part because of the five-year smoothing technique employed by the actuary. Due to the use of this smoothing technique, the recognition of prior deferred gains in 2004 through 2007 offsets the loss experienced in 2008.

VRS retirement plans for political subdivisions or localities consist of 105,065 active and 32,049 retired employees representing 565 different employers. For the past several years, the number of political subdivision employees exceeded the number of State employees. While each local plan receives its own valuation, the average funded ratio on the actuarial value of assets for all of the local plans is 95.7 percent. In contrast, the aggregate actuarial funded status (the value of all plan assets divided by all plan liabilities) for the local plans is 88.7 percent. The average local employer contribution rate for plans that provide LEOS benefits is 9.6 percent, and for those that do not the rate was 7.2 percent. (LEOS benefits are enhanced retirement benefits provided to local law enforcement officers.) However, it is important to note that rates vary across localities based on their experience. Because localities are required to fund the actuarially determined contribution rates, the local plans generally have higher funded ratios than the State and teacher plans.



## VRS Cash Flow, Funded Status, and Contribution Rates

VRS funds benefits and other expenses with employee and employer contributions as well as the proceeds of its investment portfolio. With respect to cash flow, the portfolio produces considerable positive cash flow each year through interest, dividends, and other distributions. At the same time, however, VRS pays out more in benefit payments than it receives annually in employer and employee contributions. This net negative external cash-out is more than offset by cash-in from portfolio distributions. VRS reports that such positive cash flow is expected to continue indefinitely and be available to pay benefits without requiring VRS to liquidate holdings or sell assets in unfavorable market conditions.

VRS projected the portfolio's cash flow through FY 2018 and its analysis showed an increasing cash flow more than sufficient to pay expected benefits. The Board of Trustees met in October and reaffirmed its current asset allocation plan. At that time, the recent market turmoil had not caused VRS to revise its long-term investment policy. Inherent in this policy is the flexibility to shift assets opportunistically within approved ranges and limits. For example, over the last year, the staff has increased the allocation to debt-related strategies out of equity.

VRS staff recently conducted an analysis for the Senate Finance Committee in response to an inquiry about how employer contribution rates and funded status would be affected by recent market turmoil. The analysis assumed a FY 2009 return at -16.6 percent and returns in future years at 7.5 percent. It further assumed that contribution rates for the balance of the 2008-2010 biennium would remain as currently appropriated, and contributions thereafter would be funded at rates recommended by the VRS Board of Trustees.

The analysis projected a decline in funded status for the State employee plan from 88 percent in 2008 to 80.5 percent in 2010. For the Teacher plan, funded status would decline from 79.8 percent in 2008 to 75.4 percent in 2010. While these declines would be significant, employer contribution rates for each plan would increase

by only small amounts in the 2010-2012 biennium as a result of the mechanics of asset smoothing (by which investment gains and losses are only gradually recognized over a five-year period).

However, current negative economic and market conditions could result in further erosion of the value of plan assets. Since there is a great deal of uncertainty surrounding the duration of the decline of the current economic climate, the assumptions employed in the analysis may prove to be too optimistic. In addition, current economic conditions might impact the General Assembly's ability and willingness to fund the actuarially calculated employer contribution rates.

## Recent Market Conditions Affect Administrative Operations

Recent market conditions have raised concerns in the press, among public officials, and among VRS members and retirees. As a result, VRS has experienced an increase in press inquiries and higher call volumes in its Customer Contact Center. Moreover, to the extent a broader economic decline results in layoffs of State government employees, such conditions will have an actuarial impact on the VRS fund due to retirement benefits for involuntarily separated employees received through the Workforce Transition Act (WTA). Finally, market conditions have eroded the value of defined contribution member accounts.

Press inquiries for information on the VRS portfolio spiked with each release of headline news about losses in the market. VRS received 23 press inquiries in September and 10 inquiries in October. The October activity is somewhat misleading as one story written by the *Richmond Times-Dispatch* was picked up by the Associated Press (AP) and reprinted widely throughout Virginia. Press inquiries dropped markedly following the AP distribution.

Concern among VRS members is reflected to some degree by the increase in telephone calls to the VRS Customer Contact Center. Normally a slow time of year, the Contact Center received an average of 855 calls per day from October 1 through October 18. During the same period a year ago, VRS received 655 calls per day, a difference of nearly 31 percent. Inbound telephone volumes and Web usage now appear to be returning to normal. VRS has taken steps to inform members about the impact of market conditions on the fund, primarily through notifications on its website as well as an article on the front page of the most recent member newsletter.

VRS expects some impact from the Governor's recently announced budget reduction plans involving layoffs of State employees, some of whom will take retirement and need individual counseling on WTA benefits. At this time, however, VRS does not expect an overall increase in retirement applications. Instead, members are more likely to delay their retirement plans because of declines in their VRS 457 Plan account balances and other retirement savings.

As of October 31, 2008, about 55,000 State employees held \$1.1 billion in defined contribution account balances managed by VRS. These are primarily supplemental retirement savings accounts administered under the Virginia Deferred Compensation Program. During September and October, participants lost a net value of \$191.9 million, primarily from self-directed allocations to indexed stock funds. The largest such allocation was to the S&P 500 indexed fund.



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*VRS Oversight Report* is published periodically by the Joint Legislative Audit and Review Commission (JLARC) in fulfillment of Section 30-78 *et seq.* of the *Code of Virginia*. This statute requires JLARC to provide the General Assembly with oversight capability concerning the Virginia Retirement System (VRS) and to regularly update the Legislature on oversight findings.

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