



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

**VRS Semi-Annual Investment Report  
December 2009**

The recent global recession and precipitous declines in equity markets between September 2008 and March 2009 created significant investment challenges for the Virginia Retirement System (VRS). The economy has begun to show signs of recovery, and the National Bureau of Economic Research concluded in October that the U.S. recession has come to an end. As of September 30, 2009, the one-year return for the VRS pension fund was -3.1 percent, a substantial improvement over the -21.1 percent return for FY 2009. As of September 30, 2009, the fund had begun to recover losses and its market value stood at \$46.9 billion, an increase of \$8 billion over the market value calculated as of March 31, 2009.

Whereas the fund’s performance fell short of established benchmarks for the fiscal year to date and one-year periods, it outperformed the benchmarks for the five- and ten-year periods ending September 30, 2009. The fund did not earn the assumed actuarial rate of return, 7.5 percent, for either the one-, three-, five-, or ten-year periods ending September 30, 2009. However, the fund did add value (170 basis points) over the long-term benchmark for the 10-year period. Additional performance indicators are provided in Table 1.

<b>Profile: Virginia Retirement System Investments (as of September 30, 2009)</b>						
<b>Market Value of Assets:</b> \$46.9 billion						
<b>Number of External Managers:</b>						
Public Equity – 35 (13 traditional, 22 hedge funds)						
Fixed Income – 10						
<b>Number of External Investment Accounts:</b>						
Public Equity – 40 (17 traditional, 23 hedge funds)						
Fixed Income – 13						
<b>Number of VRS Investment Department Staff:</b> 57 authorized FTEs (12 vacant)						
<b>FY 2009 Investment Expenses:</b> \$274.4 million (63.6 basis points)						
<b>FY 2009 Investment Department Operating Expenses:</b> \$13.8 million* (3.2 basis points)						
<b>Investment Policy Indicators (as of September 30, 2009)</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>Policy</b>	<b>Actual</b>	<b>Domestic</b>	<b>Non-U.S.</b>	<b>External</b>	<b>VRS</b>
<b>Public Equity**</b>	44.8%	44.4%	53.1%	46.9%	75.2%	24.8%
<b>Fixed Income**</b>	25.0%	25.0%	91.7%	8.3%	58.0%	42.0%
<b>Credit Strategies**</b>	≤ 13.5%	14.3%	94.5%	5.5%	100.0%	0.0%
<b>Private Equity</b>	≤ 10.0%	8.1%	83.8%	16.2%	100.0%	0.0%
<b>Real Estate</b>	≤ 10.0%	7.6%	90.0%	10.0%	93.0%	7.0%
<b>Cash</b>	0.25%	0.62%	n/a	n/a	100.0%	0.0%
*Includes allocated administrative expenses						
** Includes hedge funds						

**Table 1**  
**VRS Investment Performance for Period Ending September 30, 2009**

<i>Program/ Performance Objective</i>	<b>Fiscal Year to Date</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>
<i>Total Fund</i>	10.3	-3.1	-1.3	4.6
Total Fund Benchmark - Intermediate	11.4	-2.4	-1.3	4.2
Total Fund Benchmark - Long Term	12.4	-0.6	-1.2	3.0
<i>Total Public Equity</i>	16.7	0.2	-3.5	4.0
Public Equity Custom Benchmark	17.2	0.3	-3.1	4.2
<i>Total Fixed Income</i>	5.9	12.9	6.3	5.2
Fixed Income Custom Benchmark	3.6	11.0	6.9	5.4
<i>Total Credit Strategies</i>	12.3	11.6	2.7	4.2
VRS Credit Strategies Custom	12.7	13.9	1.9	4.0
<i>Total Real Estate</i>	-0.4	-26.7	-4.7	6.1
Real Estate Custom Benchmark	0.1	-19.7	-1.3	7.5
<i>Total Private Equity</i>	2.0	-19.9	5.2	12.9
Private Equity Custom Benchmark	16.9	-24.1	-5.8	0.7

*Source: VRS investment department data.*

**Public Equity.** Public equity investments are higher risk investments that are expected to provide long-term capital growth and inflation protection. Both of these expectations assume a long-term time horizon. The public equity program continues to be VRS' largest asset class, constituting 44.4 percent of the portfolio or \$20.8 billion. Notably, one year ago the public equity program represented more than half of the total portfolio. This decline resulted from worldwide losses in equity markets that stemmed from the deterioration of the overall economy, as well as VRS staff's strategic reallocation of public equity investments to the credit strategies and fixed income asset classes. The public equity program underperformed established benchmarks for the fiscal year to date and the one-, three-, five-, and ten-year periods ending September 30, 2009.

A VRS investment staff analysis that was presented to the Board of Trustees in September indicated that the internally managed portion of the public equity portfolio outperformed the externally managed assets. Program staff expressed confidence in their external managers, despite the FY2009 underperformance. Program staff noted that the purposeful reduction of the number of equity-oriented hedged funds over the past five years has resulted in better interaction with these firms and in the ability of VRS staff to monitor their managers' performance.

Effective October 1, 2009, the investment department committed \$100 million to GMO Quality, a large capitalization U.S. equity manager. The staff indicated that this commitment will increase the fund's exposure to high-quality equities.

**Fixed Income.** The fixed income program serves as a diversifier for the overall portfolio. As of September 30, 2009, the fixed income program constituted 25 percent of the portfolio or \$11.7 billion. Almost all (91.7 percent) of fixed income assets were domestically invested. The fixed income program outperformed its benchmark for the fiscal year to date and the one-year period, but fell short of the benchmark for the three- and five-year periods ending September 30, 2009. The program's performance for the ten-year period (6.4 percent) equaled that of the benchmark.

Over the past two years, the Board of Trustees approved increases in the policy target of the fixed income program due to the investment staff's desire to reallocate some public equity investments to credit and debt-related strategies within fixed income. The policy target is currently 25 percent of the total fund. Between September 2008 and September 2009, the proportion of fixed income assets invested in credit strategies has increased from 27 percent to 43 percent. According to VRS staff, this shift has been beneficial to the overall performance of the portfolio because it shielded some assets from the equity market downturn.

**Credit Strategies.** In the current VRS portfolio, credit strategies are used opportunistically and are considered an alternative to the domestic equity market. The credit strategies program is fairly new, having begun on July 1, 2004. Benefits of this asset class include further diversification and cash flow benefits, as well as lower volatility compared to equities. VRS credit strategies include investments in areas such as public high yield debt, private debt, convertible bonds, bank loans, and high yield asset-backed securities. As of September 30, 2009, the program had \$6.7 billion in assets and represented 14.3 percent of the total fund. The VRS credit strategies program underperformed its fiscal year to date and one-year benchmarks, but outperformed the three- and five-year benchmarks.

**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. Whereas, in the past, the private equity program has outperformed the public asset classes, this has not been the case for the program's fiscal year to date or one-year returns as of September 30, 2009. However, the dollar-weighted annualized performance since the inception of the program in April 1989 through June 30, 2009, was 22.23 percent. As of September 30, 2009, private equity represented 8.1 percent of the total fund or \$3.8 billion.

The private equity program continues to add value to the overall portfolio and exceeded established benchmarks for the ten-, five-, three-, and one-year periods ending September 30, 2009. This was not the case for fiscal year to date returns, however, with the program earning 2.0 percent compared to the benchmark return of 16.9 percent. While exceeding benchmarks for the calendar year to date and one-year periods, the program still experienced losses of -14.7 percent and -19.9 percent respectively over these periods.

Current economic conditions have proved very challenging for the private equity program. Investments made over the last several years are strained by the negative impacts of the recession on their underlying companies. As a result, VRS does not expect existing private equity investments to produce significant returns and does expect to incur losses. Further, VRS does not expect favorable exit opportunities in the near term and will likely increase holding periods for many of its investments. Still, good buying opportunities are expected to arise from these economic conditions. VRS intends to continue concentrating its private equity investments with managers who have demonstrated an ability to deliver good performance in such conditions.

**Real Estate.** The VRS real estate program underperformed its benchmark for the fiscal year to date and the one-, three-, five-, and ten-year periods ending September 30, 2009, experiencing losses of -26.7 percent over the one-year period. The majority (90 percent) of the real estate portfolio is invested in U.S. holdings. The to-

tal value of the real estate portfolio as of September 30, 2009, was \$3.6 billion or 7.6 percent of the total fund.

**Hedge Funds.** VRS considers hedge funds active investment strategies that can be used within any of the investment programs, subject to a total policy limit currently set by the Board at ten percent. While not considered a separate asset class, investments in hedge fund strategies constituted \$3.8 billion or eight percent of the total portfolio as of September 30, 2009. Most of the hedge fund managers are public equity managers, but there are also hedge fund managers in the credit strategies and fixed income programs. Hedge funds have outperformed during the weak market conditions of the past year.

**Tracking Error Recalculated.** At the September Board of Trustees meeting, investment department staff announced a revision to the manner in which tracking error is calculated. As the fund's measure of risk, tracking error measures the difference in performance between the various asset classes and their intermediate term benchmarks. The change in tracking error calculation will allow the investment department to properly combine quarterly data for the private asset classes (private equity and real estate) with the monthly data for the public asset classes. This change has led to a more accurate – and lower – tracking error exhibited by the fund.

### **Fiscal Year 2009 Subjective Goals for the Investment Department**

At the September 2009 Board of Trustees meeting, investment staff provided an overview of their progress on the subjective investment department goals set by the Board for fiscal year 2009. First, the staff performed an analysis of the investment policy implications of a potential industry change to valuing public fund liabilities based on market value rather than actuarial value. Staff concluded that “a market value approach could potentially have significant implications for our approach to risk management, since interest rate risk would become a dominant risk factor.” Second, the staff worked with the Defined Contribution Plan Advisory Committee (DCPAC) to review the investment options offered under the State's defined contribution plans. The DCPAC has not yet sought any Board action regarding modifications to investment options, but the committee does plan to eventually request several changes as a result of the investment department's input. Finally, the Board requested that the investment staff perform a systematic review of the due diligence process for each of the investment programs. From these reviews, managers for each program identified areas in need of improvement within their respective programs.

### **Placement Agent Policy**

In September, following inquiries by JLARC staff, the media, and some Board of Trustees members regarding the use of placement agents by firms hired by VRS to manage its investments, the investment department revised its Code of Ethics and Standards of Professional Conduct Policy to address the use of third party placement agents. The policy was amended in part (as noted by italics) to read as follows: “The intent of this Policy is to help ensure that, among other things, no VRS investment associate or any member of the investment associate's immediate family seek *or accept* personal gain from the investment decisions of the VRS investment

programs as well as the related securities transactions executed on behalf of the Fund. *This Policy includes all VRS investment related business relationships, including but not limited to: investment managers, placement agents, consultants, brokers/dealers, and related vendors.*” The staff also created a disclosure form to be signed by external investment managers and placement agents that asks for a description of any relationships that could be construed as a conflict of interest regarding VRS. Finally, prior to VRS hiring any new manager, it will require that all new investments under consideration include a disclosure of fees paid to placement agents in connection with VRS, along with an explanation of these fees.

### **Board of Trustees Annual Retreat**

In September, the Board of Trustees held its annual two-day retreat to focus on topics relevant to VRS administration and investment performance. Topics included an overview of the recession, a presentation on healthcare investment opportunities, a discussion of target date funds, a presentation by the VRS consulting actuary on retirement plan costs and alternative benefit designs, and an update of the VRS modernization project.

The retreat also included a presentation by the investment department’s research staff on the VRS Investment Support Systems (VRSISS) initiative. VRSISS streamlines data gathering and consolidates data into a centralized repository for use by investment staff from each of the program areas. VRS staff reported that this initiative has improved the efficiency of many investment operations. Data collected through VRSISS include plan-level data such as performance history and transactions, market-related data such as market performance and the labor outlook, and program-specific data such as active currency exposure and benchmark analysis. Through this system, staff can readily access information on the performance and volatility of such “market movers” as the S&P 500 and Treasury securities. The program can also “flag” situations as posing a risk to VRS assets, such as the possibility of national bankruptcy in Iceland in 2008 or the political volatility in Mexico in early 2009. These flags allow staff to take defensive actions to protect assets.

### **Funded Status and Recommended Employer Contribution Rates**

Every two years, the VRS actuary calculates the assets and liabilities of each VRS pension plan. The Board of Trustees bases its recommendations for employer contribution rates from the State on this biennial analysis. In October and November, the VRS consulting actuary presented its actuarial valuations of all VRS plans. Table 2 shows (1) the funded status of each of the State plans, as well as the teacher plan, as of June 30, 2009, and (2) the recommended employer contribution rate for the next biennial budget cycle. This is the amount the actuary has projected will need to be contributed in order to move the plans toward full funding.

The primary factor leading to the decrease in funded status and associated increases in recommended contribution rates is the VRS fund’s negative investment performance since the fall of 2008. Notably, the combined unfunded liability of the State-supported plans alone amounts to \$11.9 billion, an increase of 24 percent over the total unfunded liability in 2007.

Plan	Board Certified Rates 2008-2010	Funded Rates FY 2010	Without Corridor		With Corridor	
			Funded Status as of 6/30/09	Board Certified Rates 2010-2012	Funded Status as of 6/30/09	Estimated Rates 2010-2012
State Employees	8.02%	6.26%	84.0%	8.46%	75.3%	11.57%
Teachers	11.84%	8.81%	76.1%	12.91%	68.4%	15.56%
State Police (SPORS)	24.09%	20.05%	73.6%	25.56%	66.1%	30.32%
Judges (JRS)	38.04%	34.51%	64.7%	46.79%	58.7%	51.14%
Law Officers (VaLORS)	16.78%	14.23%	72.5%	15.93%	65.3%	17.64%

Note: Rates do not include the five percent member contribution.  
Source: Cavanaugh Macdonald Consulting, LLC, VRS consulting actuary.

Two actuarial practices were used in this valuation to mitigate the impact of VRS investment returns on the recommended contribution rates. These actuarial methods are consistent with the requirement in §51.1-145 of the *Code of Virginia* that contributions “shall be determined in a manner so as to remain relatively level from year to year.” First, as is the typical practice, a five-year smoothing technique was applied to the returns, which results in recognizing only one-fifth of the asset losses experienced this past year. Second, the VRS actuary recommended to the Board that it suspend the “actuarial value of assets corridor” used to ensure that the actuarial value of VRS assets does not differ from the market value of assets by more than 20 percent. If the corridor were to remain in place, the recommended contribution rates for the State employee and Teacher plans would be between 21 percent and 37 percent higher than they are under the scenario without a corridor. Upon the actuary’s recommendation, the Board voted to temporarily suspend the use of the corridor in light of the extreme budgetary circumstances facing the Commonwealth and certified the rates recommended by the actuary without the corridor. The VRS actuary also noted that the market had restored more than \$4 billion in assets since the June 30 valuation date, and if the valuation had been conducted in October, the actuarial value and the market value of assets would be within the corridor boundaries. Even with the suspended corridor, the change in rates between what was funded in the last budget and the Board-certified rates for the next biennium amounts to \$250.7 million (\$205.8 million in general funds) for FY 2011 alone. Notably, with or without the corridor, the actuary projects that the plans’ funded status will arrive at the same level in the next five years, assuming 7.5 percent investment returns.

On November 12, 2009, the Chairman of the VRS Board of Trustees submitted a letter to Governor Kaine and the chairmen of the House and Senate budget committees informing them of the Board-certified employer contribution rates for the 2010-2012 biennium. Importantly, the letter stated that “if no increase in rates is

possible over the next two years, the Governor and General Assembly must consider changes in plan design” because VRS staff do not believe “that investment returns alone will lift [the funds] out of their funding hole.” The VRS consulting actuary estimates that to compensate for the loss of 21.1 percent of the fund’s value in FY 2009, future returns would need to be 46.5 percent over the next year, 19.2 percent over the next three years, and 14.4 percent over the next five years. VRS staff do not expect to achieve such high returns.

At the November House Appropriations Committee retreat, VRS staff presented a summary of steps that other public pension plans have recently taken or are considering to ensure their plans’ sustainability in light of asset declines. These include enacting lower cost of living adjustments, increasing member contributions, and increasing retirement age, among others. Also, at least 11 states have commissioned studies of their retirement plan structures, similar to the work that JLARC staff undertook in 2007 and 2008, culminating in a final report, *Review of State Employee Total Compensation*.

### **Appointment to the Board of Trustees Announced**

In September, Governor Kaine appointed Colette Sheehy to serve a five-year term on the Board of Trustees. Ms. Sheehy succeeds Dr. Judith Ewell, whose term had expired. Ms. Sheehy has held the position of vice president for management and budget at the University of Virginia since 1993. She serves as the university’s senior budget officer.

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