VRS OVERSIGHT Report

JOINT LEGISLATIVE AUDIT & REVIEW COMMISSION
OF THE VIRGINIA GENERAL ASSEMBLY

Semi-Annual Investment Report
December 2013

Retirement, disability, and other related benefits are paid to retired or disabled members of the Virginia Retirement System (VRS) and their beneficiaries out of the VRS trust fund. As of September 30, 2013, the VRS trust fund held $60.2 billion in assets. For the one-year period from September 30, 2012 to September 30, 2013, the fund achieved a return of 11.9 percent and increased in value by $5.2 billion. Investment expenses in fiscal year 2013 of $331.9 million were $43.2 million greater than expenses for fiscal year 2012.

Compared to the benchmarks adopted by VRS, the investment performance of the total trust fund and its individual asset classes have been positive. The total fund's performance exceeded its benchmark in the fiscal-year-to-date, one-, three-, five-, and ten-year periods ending September 30, 2013. The public equity, fixed income, real assets, and private equity programs all outperformed their benchmarks for the ten-year period ending September 30, 2013.

Profile: Virginia Retirement System Investments as of September 30, 2013

Market Value of Assets: $60.2 billion

Number of External Managers
- Public Equity – 27 managers
- Credit Strategies – 25 managers
- Fixed Income – 1 manager
- Private Equity – 67 managers
- Real Assets – 32 managers
- Strategic Opportunities – 3 managers

	10 years	5 years	3 years	1 year
Total Return on Investments	**7.6%**	**7.1%**	**9.2%**	**11.9%**
VRS Custom Benchmark	**7.0%**	**6.5%**	**9.0%**	**11.3%**

Number of VRS Investment Department Staff: 60 authorized FTEs (1 vacant)

FY 2013 Investment Expenses: $331.9 million (56.9 basis points of the total fund)

FY 2013 Investment Department Operating Expenses: $19.6 million (3.4 basis points)

Investment Policy Indicators as of September 30, 2013

	Asset Allocation	*Asset Allocation (% of Asset Class)*		*Type of Management (% of Accounts)*	
Asset Class	**% of Total Assets**	**Domestic**	**Non-U.S.**	**External**	**Internal**
Public Equity	**43.8%**	**46.2%**	**53.8%**	**67.0%**	**33.0%**
Credit Strategies	**18.3**	**80.0**	**20.0**	**98.0**	**2.0**
Fixed Income	**18.6**	**100.0**	**0.0**	**1.2**	**98.8**
Private Equity	**8.3**	**82.4**	**17.6**	**100.0**	**0.0**
Real Assets	**9.7**	**85.0**	**15.0**	**97.9**	**2.1**
Strategic Opportunities	**0.6**	**100.0**	**0.0**	**100.0**	**0.0**
Cash	**0.8**	**n/a**	**n/a**	**100.0**	**0.0**

Table 1
VRS Investment Performance for Period Ending September 30, 2013

Program/ Performance Objective	Fiscal Year to Date	1 Year	3 Years	5 Years	10 Years
Total Fund	4.3%	11.9%	9.2%	7.1%	7.6%
Total Fund Benchmark*	3.9	11.3	9.0	6.5	7.0
Total Public Equity	6.9	19.4	11.0	8.7	8.1
Public Equity Custom Benchmark	7.1	18.6	10.4	7.8	7.7
Total Credit Strategies	2.8	8.9	7.7	9.9	n/a
VRS Credit Strategies Custom Benchmark	2.4	5.7	6.3	8.3	n/a
Total Investment-Grade Fixed Income	0.7	–1.3	3.6	7.0	5.2
Fixed Income Custom Benchmark	0.6	–1.7	3.0	5.5	4.7
Total Real Assets	3.1	11.1	13.6	3.3	9.5
Real Assets Custom Benchmark	3.1	10.8	12.7	3.6	9.3
Total Private Equity	3.7	14.8	14.0	6.8	14.7
Private Equity Custom Benchmark	0.5	20.9	20.1	9.3	10.1
Strategic Opportunities	0.1	n/a	n/a	n/a	n/a
Strategic Opportunities Custom Benchmark	0.6	n/a	n/a	n/a	n/a

* The Board of Trustees adopted a single, five-class policy benchmark structure, effective July 1, 2013. The single benchmark will consist of global public equity, fixed income, credit strategies, real assets, and private equity asset classes.

Source: VRS investment department data, 2013.

Public Equity. The public equity program continues to be VRS's largest asset class, constituting 43.8 percent of the portfolio or $26.4 billion. Public equity investments are typically 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. VRS staff have cautioned that the program may not perform as well as the overall public markets in periods of substantial gains, because the program has more exposure to higher quality stocks than the market as a whole.

The public equity program outperformed its benchmark in all periods but the fiscal-year-to-date period as of September 30, 2013. The public equity program achieved a one-year return of 19.4 percent, 80 basis points greater than its benchmark for that period. Over the ten-year period, the public equity program exceeded its benchmark by 40 basis points. Public equity is the only asset class with the majority of its investments in non-U.S. holdings. One-third of this program's accounts are managed internally.

Investment-Grade Fixed Income. The fixed income program is VRS's second largest asset class, accounting for $11.2 billion of the trust fund's assets, or 18.6 percent of the portfolio as of September 30, 2013. For the period ending September 30, 2013, the program outperformed its benchmark in the one-, three-, five-, and ten-year periods, as well as the fiscal-year-to-date period. All of the fixed income assets are invested in U.S. dollar denominated securities.

VRS has continued to move more of its assets under internal management, and more than half of the internally managed assets are in the fixed income portfolio. Internal accounts currently represent 99 percent of the fixed income program, compared to 97 percent as of September 30, 2012 and 35 percent as of September 30, 2011.

Credit Strategies. The credit strategies program is the third largest VRS asset class and held $11.0 billion in assets, or 18.3 percent of the total fund, as of September 30, 2013. The VRS credit strategies program includes investments in broad subcategories such as rate sensitive, non-rate sensitive, emerging market, and convertible bonds. According to VRS staff, in the current VRS portfolio, credit strategies are used opportunistically whenever they are expected to provide good risk-adjusted returns relative to traditional stock and bond investment options available to the plan. The credit strategies program outperformed its established benchmark in all periods measured by VRS as of September 30, 2013. The majority (80 percent) of VRS's credit strategies are invested domestically, and most accounts are managed externally.

Real Assets. The total value of the VRS real assets portfolio as of September 30, 2013, was $5.8 billion, or 9.7 percent of the total fund.** The real assets program includes investments in real estate infrastructure, as well as natural resources such as timber. This asset class performed at or above its benchmark in all but the five-year period ending September 30, 2013. The majority (85 percent) of the real assets portfolio is invested domestically, and most accounts are managed externally.

Private Equity. As of September 30, 2013, private equity constituted 8.3 percent of the total fund, or $5.0 billion.* Private equity is an alternative to traditional public equity. Through active equity management, VRS expects to earn a meaningful return on its private equity investments. The private equity program earned higher returns than the public equity program in the three- and ten-year periods.

For the period ending September 30, 2013, the private equity program had mixed performance. Specifically, the private equity program's performance exceeded its benchmark in the fiscal-year-to-date and ten-year periods, but underperformed for the one-, three-, and five-year periods ending September 30, 2013. Most (82 percent) of VRS's private equity assets are invested domestically, and all private equity assets are managed externally.

Strategic Opportunities. In 2012 VRS created a new portfolio to manage investments that have a compelling potential for positive returns but that do not fit neatly into the five asset classes described above. As of September 30, 2013, the portfolio held $371 million in assets. Examples of individual investments in this portfolio are a global asset allocation hedge fund, a currency management investment, and a joint venture in commercial mortgages. In the short time since its inception, the strategic opportunities portfolio has achieved positive returns, but it has underperformed its benchmark.

Board of Trustees Provides First Required Report on Internal Investment Program to the Governor and General Assembly

VRS has used internal investment staff to manage a portion of its assets for more than ten years, and approximately one-third of its investments are currently managed internally. A provision of the 2013 Appropriation Act requires the Board to report on the performance of its internally managed investments. The new provision states:

> By September 30 of each year, the VRS Board of Trustees shall report to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees on the prior fiscal year's results obtained by the internal

*Whereas performance figures for the real assets and private equity programs reflect data on cash flow into the program as of September 30, 2013, they do not reflect managers' actual valuations of these investments as of that date, because these data have not yet been made available to VRS. Instead, their performance is based on June 30, 2013, valuations, adjusted for cash flows during the quarter ended September 30, 2013.

> investment management program. The report shall include a comparison of investment performance against the board's benchmarks and an estimate of the program's fee savings when compared to similar assets managed externally.

In September 2013, the Board provided the required performance summary of its internal investments to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees. According to the performance summary, as of June 30, 2013, the internal investments had exceeded their benchmarks, and VRS had saved approximately $11.4 million in FY 2013 by avoiding outside manager fees.

Board Certifies New Employer Contribution Rates for 2014-2016 Biennium

Every year, the VRS actuary calculates the assets and liabilities of each VRS pension plan as well as the contribution amounts that will be needed from the State and its political subdivisions to fund each plan. The VRS Board of Trustees recommends new employer contribution rates every two years, based on the VRS actuary's analysis. The Board's recommended rates are the basis for the contributions made to the VRS trust fund each biennium by the State and its political subdivisions.

For each of the State-supported plans (which includes the teachers' plan), Table 2 shows (1) the employer contribution rates newly certified by the VRS Board for the 2012-2014 and 2014-2016 biennia, (2) the employer contribution rates actually funded by the General Assembly for FY 2013 and FY 2014, and (3) the employer contribution rates projected to be funded for the 2014-2016 biennium. The rates recommended by the VRS actuary have increased by an average of ten percent between the FY 2011 and FY 2013 valuations, with the largest increase experienced by the State employees' plan (21 percent).

The rates that will actually be funded are expected to increase even more substantially, at an average of nearly 23 percent. This is due to the expectation that the General Assembly will adhere to the schedule it adopted in 2012 to phase in full funding of the VRS Board-certified rates by FY 2019. The Code of Virginia now requires that 78.02 percent of the Board-certified rates for the State employees' plan be paid for FY 2015 and FY 2016, 89.01 percent for FY 2017 and FY 2018, and 100 percent for FY 2019 and beyond. According to the VRS actuary, the recommended contribution rates are expected to continue to increase for the next three biennia and begin to decline in the 2020-2022 biennium.

Not shown in the table above are the results of the valuations of each of the 583 political subdivisions participating in VRS. The employer contribution rates for these plans decreased by an average of nearly seven percent between the FY 2011 and FY 2013 actuarial valuations. Of the 583 political subdivisions, 422 will have a decrease in employer contribution rates for fiscal years 2015 and 2016. However, the magnitude and direction of the change in recommended contribution rates varied across political subdivisions based on differences in plan experience. For example, five of the ten largest political subdivisions, as defined by the market value of their VRS assets, will experience a decrease in recommended contribution rates for the 2014-2016 biennium, while the remaining five will experience an increase.

Table 2
FY 2013 Actuarial Valuation Results for State-Supported Plans

	Board-Certified Contribution Rates		Funded Rates		Projected Increase in Funded Rates
	FY 2012-2014 Biennium	FY 2014-2016 Biennium	FY 2012-2014 Biennium	FY 2014-2016* Biennium (Projected)	
State Employees	13.07%	15.80%	8.76%	12.33%	40.75%
Teachers	16.77	18.20	11.66	14.50	24.36
State Police (SPORS)	32.62	32.93	24.74	27.63	11.68
Judges (JRS)	54.11	57.84	45.44	51.66	13.69
Law Officers (VaLORS)	19.52	21.74	14.80	18.24	23.24

* Rates are projections based on the schedule adopted in 2012 by the General Assembly to phase in full funding of the VRS Board-certified rates by FY 2019.

Source: Cavanaugh Macdonald 2011 and 2013 actuarial valuations of the defined benefit retirement plans for State employees, teachers, the State Police Officers' Retirement System, the Virginia Law Officers' Retirement System, and the Judicial Retirement System.

Funded Status Decreased for State Employees' and Teachers' Plans, Increased for Political Subdivision Plans

The most common measure of a pension plan's financial health is its funded status, which reflects the ratio of assets that are available to pay for existing liabilities. Beginning in FY 2009, the funded status of the five State-supported plans began to decrease, largely due to the impact of the investment losses experienced in FY 2008 and FY 2009, but also to a shortfall in employer contribution rates. Specifically for the State employees' and teachers' plans, between FY 2008 and FY 2013 the VRS actuary calculated that these plans' funded status decreased from 88.0 percent to 65.1 percent and from 79.8 percent to 62.1 percent, respectively. The funded status for the other three State-supported plans—those for judges, State police, and other law enforcement officers—also decreased between FY 2008 and FY 2013.

Between the FY 2012 and FY 2013 valuations, the funded status of three of the five State-supported plans improved, based on the actuarial value of their assets. Specifically, the funded status of the plans for judges, State police officers, and other law enforcement officers increased by an average of 1.4 percentage points. However, the funded status of the largest plans—those for State employees and teachers—experienced further decline. This decline was relatively slight, however, and less than the magnitude of previous recent declines experienced by these two plans.

Overall, from FY 2012 to FY 2013, the gap between the liabilities of the five State-supported plans and their available assets increased by two percent to $23.88 billion. Most of the increase is attributed to actuarial losses that resulted from (1) employer contributions paid at rates below those required by the actuary and (2) investment underperformance relative to the rates of return assumed by the actuary. Investment performance in FY 2013 exceeded the actuary's assumed rate of return.

However, because VRS uses the generally accepted actuarial practice of "smoothing" asset gains or losses over a five-year period, a portion of the 21.1 percent asset value decline experienced in FY 2009 was recognized in the FY 2013 valuation. The FY 2013 valuation is the last year that these substantial losses will be recognized in the plans' actuarial value of assets.

Starting with the FY 2014 valuation, the funded status of the State-supported plans is projected to improve. However, their funded status is not expected to reach pre-recession levels for several years. For example, the funded status of the State employees' and teachers' plans are not expected to reach the 70 percent level until 2031 and 2025 respectively. These projections assume that VRS's investments meet the Board's seven-percent earnings expectations and that employer contributions equal the Board-certified rates by FY 2019.

The average funded status of the 583 political subdivisions that belong to VRS improved between FY 2012 and FY 2013. The weighted average of the funded status of these plans increased from 76 percent of assets on hand to pay for liabilities to 78.7 percent. Of the 583 plans, 283 had a funded status of 80 percent or below, and 300 had a funded status above 80 percent, including 74 plans with a funded status exceeding 100 percent.

Impact of Pension Reform on Contribution Rates Is Expected to Be Gradual

In 2010 and 2012, the General Assembly made several changes to the retirement benefits provided to employees of the State and its political subdivisions, including teachers, that were intended to reduce employers' costs. These changes included increasing the time that employees must work to be eligible for a full benefit, modifying the benefit formula to result in a lower benefit for employees hired under the new provisions, and requiring most newly-hired employees as of January 1, 2014 to enroll in a hybrid retirement plan. Additionally, between January 1, 2014, and April 30, 2014, existing employees will have the option of enrolling in the hybrid plan in lieu of their defined benefit plan. The hybrid retirement plan is projected to be less costly to employers than the traditional defined benefit plan.

Because these changes mostly apply to newly-hired employees, their impact on the contribution rates required of employers will be relatively gradual. As of June 30, 2013, 26 percent of active teacher plan members and 29 percent of active State employee plan members were enrolled in the lower–cost benefit plans. These proportions will increase as new employees are hired, which will further decrease the plans' costs. When all active plan members are enrolled in this benefit structure in approximately 20 years, the VRS actuary estimates that the cost of the benefits will be approximately 33 percent less for the State employees' plan and 38 percent less for the teachers' plan. For the 2014-2016 biennium, this equates to less than one percent of payroll, but, by the 2022-2024 biennium, savings of approximately 1.5 percent of payroll is expected for the State employees' plan and 2.2 percent of payroll for the teachers' plan.

2013 Valuation Uses New Funding Policy Adopted By Board

The employer contribution rates certified by the Board for the defined benefit plans administered by the State and its political subdivisions were calculated using a new funding policy that the Board adopted in 2013. The funding policy was necessitated by standards issued in 2012 by the Governmental Accounting Standards Board (GASB) which result in GASB no longer providing guidance on how employers fund the cost of pension benefits or how pension plan administrators calculate the necessary contributions. In response, national associations including the National Governors Association, National Conference of State Legislatures, and the Government Finance Officers Association, established a Pension Funding Task Force to develop guidelines that could be used by state and local governments to fund the costs of pension benefits.

VRS's newly-adopted funding policy is consistent with the guidance and recommendations issued by this national task force. This funding policy maintained several of the key assumptions and methods used by VRS in previous valuations, such as the actuarial cost method used to determine the value of future benefits and the asset valuation method used to calculate the actuarial value of the plans' assets. In general, the new funding policy resulted in a slight decrease in the actuary's recommended rates, as compared to what they would have been under the previous funding policy. Across the five State-supported plans, this decrease averaged less than one percent.

The primary change resulting from the new policy relates to the manner in which VRS amortizes its unfunded liabilities, as this was the one aspect of VRS's previous funding policy that differed from the national task force's recommendations. VRS's newly adopted funding policy requires the actuary to change two aspects of its amortization methods: (1) existing liabilities must be amortized over a closed, rather than open, 30-year period; and (2) any new liabilities added to the system must be separately amortized over closed 20-year periods. Previously, VRS used a "closed" amortization period of 30 years, which it planned to transition to an "open" period of 20 years after a ten-year period.

An "open" amortization period is one in which the time used to pay off unfunded liabilities is reset every year. When using amortization periods of 20 years or more, unless the trust fund achieves returns that exceed the actuary's expected rate of return, the unfunded liabilities are unlikely to be eliminated when using open amortization. A "closed" amortization period is one in which the time used to pay off the liabilities decreases each year so that, at the end of the time period, all liabilities are paid off. The "closed" method has the benefit of retiring liabilities over the expected working lifetime of the pension plan members who are impacted.

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

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