



JOINT LEGISLATIVE AUDIT  
& REVIEW COMMISSION  
OF THE VIRGINIA GENERAL ASSEMBLY

## VRS Biennial Status and Semi-Annual Investment Report December 1999

- **Semi-Annual VRS Investment Report: December 1999** ..... *Page 2*  
 The performance of the fund relative to its one-year performance benchmark continued to improve. Performance for the three- and five-year periods exceeded established performance benchmarks.
- **VRS Continues to Focus on Enhanced Benefits Administration and Service Delivery** ..... *Page 3*  
 The VRS governing structure continues to work as intended. In addition, VRS management continues to implement and plan programs designed to improve service delivery.
- **Review of VRS' 1998 Actuarial Valuation and Benefit Funding** ..... *Page 6*  
 Employer rates for FY 2001 and FY 2002 certified by the Board of Trustees reflect full prefunding of the COLA. In addition, the rates reflect the impact of several recent benefit enhancements. Moreover, VRS pension funding continues to improve.
- **Modifications to the Deferred Compensation Program Have Recently Been Implemented** ..... *Page 10*  
 VRS recently modified the State's deferred compensation program to increase the number of investment options and reduce investment management fees charged to participants. The employer cash match program approved by the 1999 General Assembly will likely increase participation in the deferred compensation program.

<b>Profile: Virginia Retirement System Investments</b>						
<b>Market Value of Assets: \$34.9 billion</b>						
<b>Number of External Managers: Public</b>						
Equity – 23 Fixed Income – 6						
<b>Number of External Investment Accounts:</b>						
Public Equity – 35 Fixed Income – 12						
<b>FY 1999 Investment Expenses: \$79.7 million</b>						
(24.7 basis points)						
<b>FY 1999 Investment Department Operating Expenses: \$4.8 million (1.5 basis points)</b>						
<b>Number of VRS Investment Department Staff: 31 positions (two vacancies)</b>						
<b>Investment Policy Indicators (as of September 30, 1999)</b>						
Asset Class	Asset Allocation (% of Total Assets or \$ Amount)		Asset Allocation (% of Asset Class)		Type of Management (% of Asset Class)	
	Target	Actual	Domestic	International	External	VRS
Public Equity	65.4%	63.1%	74.2%	25.9%	81.4%	18.6%
Fixed Income	25%	26.1%	99%	1%	66.4%	33.6%
Private Equity	\$2 billion	\$2.3 billion	90%	10%	100%	0%
Real Estate	\$1.35 billion	\$1.3 billion	95.6%	4.4%	100%	0%

Total Return on Investments			
10 years	5 years	3 years	1 year
11.9%	16.4%	15.8%	19.6%
Performance/Intermediate Benchmarks			
(Time Periods Ending 9/30/99)	16.3%	15.7%	20.4%

## VRS Biennial Status and Semi-Annual Investment Report December 1999

### INTRODUCTION

The Virginia Retirement System Oversight Act (Section 30-78 et seq. of the *Code of Virginia*) requires JLARC to prepare a biennial status report and semi-annual investment report concerning the Virginia Retirement System (VRS). This particular report includes both the semi-annual investment report for December 1999 and the second biennial status report. The first section of this report covers the VRS investment program. The other sections of this report focus on the administrative aspects of VRS' program, the FY 2001 and FY 2002 employer contribution rates, and the VRS administered deferred compensation plan.

As an independent agency, VRS continues to improve the delivery of services and benefits administration for its members. In addition, its governing and advisory structure is sound and appears to be working as intended by the General Assembly. VRS' top management, with strong support from the Board of Trustees, is aggressive in identifying and addressing agency weaknesses, and proactive in planning for the future. Nonetheless, consistent monitoring of VRS by the legislative branch is important to ensure that the changes made work as intended and that improvements continue in the future.

### SEMI-ANNUAL VRS INVESTMENT REPORT: DECEMBER 1999

As reported in the July 1999 *Semi-Annual VRS Investment Report*, the one-year investment performance of the fund at that time trailed its performance benchmark by 2.8 percentage points. However, as of September 1999, the fund's under performance relative to its one-year performance benchmark had narrowed substantially. The improved one-year performance of the fund also had an impact on the three- and five-year periods as well as the performance for those two periods exceeded established benchmarks.

The domestic public equity market environment continued to impact the fund's overall in-

vestment performance. During the third quarter of calendar year 1999, large-cap growth stocks continued to outperform more value-oriented stocks. For example, since January 1, 1999, the Russell 3000 Growth Index returned 6.5 percent while, in contrast, the Russell 3000 Value Index returned only 1.4 percent for the same period. This market characteristic negatively impacts more diversified portfolios such as VRS' public equity portfolio. Finally, other asset classes had a positive impact on the fund's overall performance (Table 1). For example, fixed income exceeded its performance benchmarks for each time period. Private equity continued to provide substantial returns to the VRS investment portfolio across all three time periods.

During 1999, the VRS investment department has methodically reviewed, and where necessary, enhanced varying facets of its investment program. For example:

- **Domestic Equity Program:** Completed a comprehensive review of the domestic equity program. Based on this review, the Board approved a recommendation to increase the passive portion of the domestic equity portfolio to 70 percent. Staff continued to focus on risk management by en-

## OVERSIGHT VRS Report

*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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**Table 1: VRS Investment Program Performance, September 30, 1999**

<b>Program</b>	<b>Prior 1 Years</b>	<b>Prior 3 Years</b>	<b>Prior 5 Years</b>
Total Fund	19.6%	15.8%	16.4%
<i>VRS Performance Benchmark</i>	20.4%	15.7%	16.3%
Domestic Equity	24.9%	21.3%	22.3%
<i>Russell 3000</i>	26.3%	22.4%	23.0%
International Equity	37.0%	6.6%	6.9%
<i>Custom MSCI ACW ex US</i>	38.0%	4.5%	5.8%
Fixed Income	0.0%	7.0%	8.1%
<i>Lehman VRS Custom</i>	-0.4%	6.9%	7.5%
Private Equity	30.7%	31.9%	31.8%
<i>Russell 3000</i>	26.3%	22.4%	23.0%
Real Estate	6.4%	11.0%	8.8%
<i>Custom Benchmark</i>	10.5%	12.2%	10.9%
Source: Virginia Retirement System			

sure the externally managed active program is structured consistent with Board approved policy.

- **Fixed Income Program:** Continued to move more of the passive fixed income program in-house for VRS staff to manage, reducing expenses and increasing control. As of September 1999, more than 33 percent (\$3.1 billion) of the fixed income program was managed internally by VRS staff.
- **Real Estate Program:** Conducted a comprehensive review of the real estate program. The consultant that conducted the review noted that, over time, the VRS real estate program's objective had moved from diversification to more of a return orientation. The consultant noted that a number of implications were related to adopting a return-oriented real estate portfolio. The Investment Advisory Committee requested that investment department staff develop a proposal for its subsequent review and discussion on how to manage this program relative to the entire VRS investment portfolio.

Finally, the VRS investment department continues to address the issue of investment expenses. For example, one benefit of increasing the passive portion of the public equity program and

bringing more fixed income assets in-house for VRS staff to manage is the ability to reduce expenses. In addition, a performance-based fee structure was recently implemented for another large program (long-only) in the public equity portfolio.

The cumulative impact of these types of efforts has been substantial. Since FY 1994, investment management expenses have been reduced from 41.8 basis points to 24.7 basis points in FY 1999. According to VRS, the cumulative impact of these efforts for FY 1994 – FY 1998 have resulted in cost savings totaling more than \$40 million. Nonetheless, the Board of Trustees recently reiterated its desire to have VRS investment staff continue its efforts to reduce investment management expenses even further.

**VRS CONTINUES TO FOCUS ON  
ENHANCED BENEFITS  
ADMINISTRATION AND  
SERVICE DELIVERY**

The VRS Board of Trustees and director continue to focus on both maintaining recent improvements in the agency's delivery of services to its members and implementing strategies that will result in additional enhancements. This process occurs within the context of VRS' strategic busi-

ness plan, which includes the agency's strategic business objectives. VRS has implemented a number of initiatives to improve benefit administration and service delivery. In addition, VRS must often address service delivery improvements concurrently with numerous and, at times, complex changes to the benefit structure. Despite undertaking substantial service delivery improvement initiatives and implementing changes to the benefit structure, results from a consultant's report indicates that VRS continues to provide service at a relatively low cost.

### **VRS Governing Structure Continues to Work as Intended**

In 1994, the General Assembly enacted several reforms pertaining to the VRS governing structure. These changes included:

- establishing VRS as an independent State agency;
- providing the General Assembly with trustee appointment authority;
- increasing the size of the Board;
- increasing the amount of investment expertise on the Board while retaining certain trustees to represent members and beneficiaries;
- giving the Investment Advisory Committee statutory responsibilities while strengthening membership criteria; and
- giving the chief investment officer statutory responsibilities.

The changes that have been enacted to strengthen the governance and operations of VRS appear to be working as intended. For example, the investment and financial expertise contributed by several trustees is complemented by the direct sensitivity to member and beneficiary interests on the part of other trustees. In addition, no one individual appears to dominate the deliberations of the Board or the advisory committee. Finally, the Board and the advisory committee do not appear to unduly micromanage the staff.

The environment fostered by the current governance structure has enabled VRS management to continue to focus on improving agency operations and service delivery. These efforts are aided by the fact that VRS has both a director and a chief investment officer, which enables the di-

rector to focus entirely on benefit administration and agency support. Several significant initiatives designed to improve service delivery have already been completed, with other enhancements either in the review and development process. Moreover, these changes have been planned and implemented at a time when substantial changes to the system's benefit structure have also required substantial staff and resource commitments.

### **Board-Approved Strategic Plan Guides VRS' Daily Business Activities**

The strategic business plan approved by the Board of Trustees is the framework which guides the efforts of VRS in providing and improving customer service and benefits administration. The strategic plan includes the mission statement and six major activities that must be completed for the agency to meet its mission. These six activities are:

- pay benefits,
- collect and disburse funds,
- provide stewardship of funds,
- maintain records and eligibility,
- inform and educate members and employees, and
- provide support for major agency functions.

Within the agency strategic business plan, each work unit develops a mission statement and performance measures that support completion of the agency's business activities.

Finally, strategic business objectives (SBOs) were developed to measure VRS' progress in meeting its mission and completing its major business activities. The SBOs are also management tools for VRS administrators in their effort to facilitate activities to improve customer service and benefit administration. The 1999 VRS strategic business objectives are illustrated in Table 2. The Board of Trustees approves the SBOs and is continuously apprised of the agency's status relative to the established goals. Finally, the SBOs are directly linked with VRS' pay for performance program.

### **VRS Service Delivery Improvement Initiatives and Changes to the Benefit Structure**

Since 1996, VRS has initiated and completed several projects designed to improve benefits ad-

**Table 2: VRS Strategic Business Objectives for 1999**

Strategic Business Objective	Goal/Target
Year 2000 computer projects within VRS' control completed	100%
Comprehensive system scheduled availability	98.5%
Member benefits processed in a timely manner ( <i>retirement within 90 days, refunds within 60 days, and death claims within 30 days</i> )	98%
Calls answered by Information Center within 30 seconds with no more than ten percent transferred	90%
Employer payrolls updated and posted within 30 days	95%
Administrative costs per member	<\$50
Completion of data integrity project	by June 30, 2000
Investments earnings	Exceed benchmarks
Source: Virginia Retirement System	

ministration or service delivery. These include implementation of a state-of-the-art information center, implementation of the Virginia information and reporting system (VIPERS), and the data integrity project (Table 3). However, as also illustrated in Table 3, VRS staff have often been required to concurrently implement several complex changes to the program's benefit structure.

For example, an entirely new program, the Virginia Sickness and Disability Program, was developed and implemented in 1998. Moreover, between March 1999 and October 1999, VRS staff had to develop and implement an entirely new retirement system – VaLORS (Virginia Law Officers' Retirement System). Finally, between FY 1996 and FY 2000, there were three alterations to the system's purchase of service benefits. Changes to the purchase of service benefit structure are significant because they tend to add another layer of complexity to that segment of VRS' administrative program.

Finally, VRS continues to identify areas in which improvements to the benefits administra-

tion structure are warranted. A major initiative that is in the planning phase is the development of a knowledge-base system. A knowledge-base system compiles and organizes vast amounts of information electronically in a manner that can be easily accessed by users. The Board of Trustees continues to support the development of this system and has approved funding in three year increments totaling \$550,000.

For an organization such as VRS, which administers an increasingly complex pension program, having information organized in a systematic and readily accessible manner is critical. A knowledge-base system will assist VRS staff in providing timely and accurate information to members, employers, and other VRS staff involved in managing the pension system and its myriad of benefit options. Other benefits attributable to the knowledge-base system include increased staff productivity and more efficient use of agency staff expertise.

At this time, VRS has implemented a formal planning and development process for the knowledge-base system. An interdepartmental project team has been established, a survey of VRS staff regarding the desired capabilities of the proposed system has been completed, a proposed list of deliverables has been developed, and project team members have visited private companies that have functional knowledge-base systems in place.

In addition to the knowledge-base system project, other initiatives are also planned. These include:

- an employer representative model for benefits administration,
- a rapid retirement process,
- rewriting the refund and disability subsystems, and
- social security and disability post approval follow-up.

Completion of most of these initiatives is anticipated during the FY 2001 and FY 2002 biennium.

### **VRS' Administrative Costs Are Comparable to Selected Peer Retirement Systems**

In FY 1999, VRS implemented a system of activity based costing that separates administrative expenses by 20 major administrative functional areas within the administrative side of the

**Table 3: Selected VRS Service Delivery Initiatives and Benefit Structure Enhancements, FY 1996 – FY 2000**

<b>Fiscal Year</b>	<b>VRS Service Delivery Initiatives</b>	<b>Significant Changes to the Benefit Structure</b>
1996	<ul style="list-style-type: none"> <li>• Information center established</li> <li>• Direct deposit campaign</li> <li>• Member and employer survey completed</li> <li>• Internet web site developed</li> <li>• VIPERS development</li> </ul>	<ul style="list-style-type: none"> <li>• Portability of service</li> <li>• Purchase of service</li> <li>• Teacher's retiree health insurance credit authorized</li> </ul>
1997	<ul style="list-style-type: none"> <li>• Strategic business objectives established</li> <li>• VIPERS implemented</li> <li>• Employer forums held</li> <li>• Interactive voice response system planning</li> <li>• Imaging department upgrades</li> </ul>	<ul style="list-style-type: none"> <li>• Impact study of proposed legislation</li> <li>• Political subdivisions authorized to join the State's deferred compensation plan</li> </ul>
1998	<ul style="list-style-type: none"> <li>• Information center training program restructured</li> <li>• Data integrity project implemented</li> <li>• Y2K compliance projects</li> <li>• Interactive voice response system installed</li> <li>• Administration for PREP contracted to community colleges</li> </ul>	<ul style="list-style-type: none"> <li>• Virginia Sickness &amp; Disability Program established</li> <li>• Purchase of service</li> <li>• Service formula change</li> <li>• Optional retirement plan for certain gubernatorial appointees</li> </ul>
1999	<ul style="list-style-type: none"> <li>• Data integrity project</li> <li>• Y2K compliance projects</li> <li>• Internet web site redesign</li> </ul>	<ul style="list-style-type: none"> <li>• Virginia Sickness &amp; Disability Plan implemented</li> <li>• Health care credit for teachers implemented</li> </ul>
2000	<ul style="list-style-type: none"> <li>• Data integrity project</li> <li>• Y2K compliance projects</li> <li>• Knowledge based systems</li> <li>• Employer representative model</li> <li>• Rapid retirement process</li> </ul>	<ul style="list-style-type: none"> <li>• 50/30 retirement implementation</li> <li>• VaLORS implementation</li> <li>• Deferred compensation employer match program implementation</li> <li>• Purchase of service</li> </ul>

Source: JLARC staff analysis of VRS documents.

agency. This system will enable VRS management to clearly identify to which activities the agency's administrative expenses are attributable, and the specific factors within these activities that influence costs.

In addition to its use as a daily management and administrative tool, the data from the activ-

ity based costing program has been used to compare VRS' administrative expenses against other public pension systems. Specifically, VRS retained a consultant to compare its cost and service levels against seven comparable public pension systems. The consultant concluded that VRS' administrative costs per active and retired

member were \$32, which was substantially less than the average of \$89 for all eight pension systems.

VRS will continue to refine its activity based costing in to improve its applicability as a tool for VRS management to better understand the costs of its business activities. In addition, the results of activity based costing will be used to participate in additional studies of VRS' administrative costs and service levels compared to other public pension plans.

**REVIEW OF VRS' 1998  
ACTUARIAL VALUATION  
AND BENEFIT FUNDING**

The employer contribution rates certified by the VRS Board of Trustees and the subsequent funding of these rates are very important to the future viability of the defined benefit program administered by VRS. The *Code of Virginia* requires that the VRS Board of Trustees conduct a biennial actuarial valuation for the purpose of analyzing the funds' assets and liabilities and to establish contribution rates for participating employers.

Based on the results of the VRS June 1998 actuarial valuation, new employer contribution rates were certified by the VRS Board of Trustees for FY 2001 and FY 2002 (Table 4). More importantly, the new employer rates reflect several significant accomplishments. These accom-

plishments include rates that reflect full prefunding of the cost of living adjustment (COLA) two years ahead of schedule and the Board's decision to include several policy and benefit changes in the FY 2001 and FY 2002 rates.

**VRS Employer Rates Reflect  
Full Prefunding of the COLA**

Current statutory language requires that the VRS employer contribution rates be determined in such a manner that they remain relatively stable from year to year. Section 51.1-145 of the *Code* states that the VRS board shall "certify to each employer the applicable contribution rate and any changes in the rate." That section also requires that the amount of State contributions "shall be based on the contribution rates certified by the Board...."

One of the major issues that has continually confronted VRS regarding employer contribution rates is the COLA. Through the early 1990's the COLA was primarily funded on a pay-as-you-go approach. Beginning with the June 30, 1994 valuation, VRS instructed its actuary to perform the valuation based on full prefunding of the COLA beginning in FY 1997. Subsequently, the 1996 General Assembly amended the *Code* to require full prefunding of the COLA by FY 2002 using a phase-in approach. However, in 1999, the VRS Board certified rates for both FY 2001 and FY 2002 that fully fund the COLA.

**Table 4: VRS Board of Trustees Certified Employer Rates, FY 2001 – FY 2002**

Benefit	State Employees	Teachers	Judges	State Police	Virginia Law Officers
Retirement	6.35%	9.61%	45.00%	25.00%	16.15%
Group Life Insurance	0.80%	0.80%	0.80%	0.80%	0.80%
Retiree Health Insurance Credit	1.57%	1.07%	1.57%	1.57%	1.57%
Virginia Sickness & Disability Program	0.83%	0.0%	0.0%	1.10%	1.10%
<b>Total:</b>	<b>10.10%</b>	<b>11.48%</b>	<b>47.37%</b>	<b>28.47%</b>	<b>19.62%</b>
Note: Rates are employer contribution rates and expressed as a percent of payroll. Rates do not include the five percent member contribution.					
Source: Virginia Retirement System.					

**Prefunding of COLA Was Originally Based on Five-Year Phase-In Approach.** Based on the June 30, 1994 actuarial review, the VRS Board of Trustees determined that the rates required to fully prefund the COLA would be substantially higher than those funded in the previous biennium. Because of this substantial increase in rates, the VRS Board of Trustees presented the Governor and the General Assembly with three options for funding the COLA. The options presented were based on: (1) continued pay-as-you-go funding of the COLA; (2) partial prefunding of the COLA, with a phase-in leading to eventual full prefunding; and (3) full prefunding of the COLA.

In 1996, the General Assembly approved a budget with VRS contribution rates that reflected a plan to fully prefund the COLA over a five year period beginning in FY 1998. The 1996 General Assembly also passed legislation that codified the five-year phase-in approach to fully prefunding the COLA that was contained in the approved budget. As a result, the *Code of Virginia* requires that the rates using the phase-in approach achieve full prefunding of the COLA by FY 2002.

In 1997, the VRS Board of Trustees presented rates that would fully prefund the COLA beginning in FY 1999. In addition, phase-in rates that would fully fund COLA by FY 2002 were also presented. The phase-in rates were incorporated into the State budget for FY 1999 and FY 2000 because they would ensure prefunding of the COLA by FY 2002 as required by the *Code of Virginia* and were lower than the full prefunding rates.

**FY 2001 and FY 2002 State Employee and Teacher Rates for Full COLA Prefunding Are Lower than Phase-In Rates.** One benefit of the strong growth of VRS' assets over the past few years is the positive impact on employer contribution rates. According to VRS' actuary, the investment return rate is the most important factor affecting the contribution rates. If the rate-of-return on investments is greater than the actuarially assumed eight percent, then it may be possible to lower contribution rates. For the period ending June 1998, the five year annualized return on the fund's assets was slightly more than 15 percent. In addition, other factors such as rela-

tively low inflation also had a positive impact on future contribution rates.

The impact of the system's investment returns on the Board's efforts to fully prefund the COLA has been substantial. Based on the June 30, 1998 actuarial valuation, the employer contribution rates for State employees and teachers that fully prefund the COLA were lower than the phase-in rates (Table 5). As noted earlier, rates that fully prefund the COLA beginning in FY 2001 are two years earlier than anticipated under the five-year phase-in approach established in 1997.

There is also substantial budgetary impact associated with the lower certified FY 2001 and FY 2002 rates. Because lower rates will be applied against the covered payroll, VRS has projected that the employer contributions for State employees and teachers will decrease by almost \$87 million over the biennium using the Board certified rates instead of the phase-in rates. These reductions will be offset somewhat by higher rates for group life insurance, the retiree health insurance credit, and Virginia Sickness and Disability Program.

**Table 5: Comparison of VRS Certified Employer Contribution Rates and Phase-In Rates, FY 2001 – FY 2002**

	State Employees	Teachers
VRS Certified FY 2001 and 2002 Rates Reflecting Full Prefunding of the COLA	6.35%	9.61%
Phase-in FY 2001 Rates	7.87%	10.56%
Phase-in FY 2002 Rates	8.89%	10.86%
Difference between FY 2000 Full Prefunding and Phase-In Rates	(1.52%)	(0.95%)
Difference between FY 2001 Full Prefunding and Phase-In Rates	(2.54%)	(1.25%)
Note: Rates are employer contribution rates and expressed as a percent of payroll. Rates do not include the retiree health insurance credit, group life, Virginia Sickness and Disability Program, or the five percent member contribution.		
Source: JLARC staff analysis of data from the Virginia Retirement System.		



**Certified Rates for SPORS and JRS Address Systems' Funding Status**

Another important issue that the VRS Board of Trustees addressed during the employer rate setting process was the funding status of the State Police Retirement System (SPORS) and the Judicial Retirement System (JRS). As of June 1998, the SPORS funding status was about 76 percent of full funding while the JRS was funded at about 66 percent of full funding. This is substantially below the funding status of the State employee and teacher systems at 89 percent and 83 percent respectively. As a result, the VRS Board of Trustees expressed concern about the funding status of the SPORS and JRS.

Specifically, the Board noted that “both systems, while relatively small, are significantly underfunded.” To address the underfunded status of these two systems, the rates certified by the Board of Trustees are generally higher than the phase-in rates (Table 6). The exception to this is the FY 2002 contribution rate for SPORS which is lower than the phase-in rate. The Board

certified rates will remain in effect “until these two systems reach at least a 90% funded status.”

**Board Certified Rates Include the Impact of Substantial Funding and Benefit Changes**

The employer contribution rates for FY 2001 and FY 2002 also reflect the impact of several Board-initiated policy changes as well as the impact of recent benefit changes. The first policy change involves the amortization schedule for the system’s unfunded actuarial liability. Prior to the June 1998 actuarial valuation, the Board of Trustees used a rolling 30-year amortization schedule to account for the unfunded actuarial liability. Consistent with a JLARC recommendation, the Board in 1999 adopted a policy that requires a 28-year amortization schedule for the unfunded liability.

In addition, the VRS Board of Trustees also certified employer rates that reflect the impact of several recent benefit changes approved by the General Assembly. These benefit changes include the change to a single benefit multiplier of 1.7 percent and the change in the age and service requirement for unreduced retirement to age 50 with 30 years of service (50/30 retirement provision). The impact of these benefit changes and the 28-year amortization schedule on the FY 2001 and FY 2002 employer contribution rates is illustrated in Table 7. The cumulative impact of these benefit and policy changes ranges from a total of 0.62 percent for State employees to 0.88 percent for teachers.

**Table 6: Comparison of VRS Certified Employer Contribution Rates and Phase-In Rates, FY 2001 – FY 2002**

	SPORS	JRS
Certified FY 2000 and 2001 Rates Reflecting Full Prefunding of the COLA	25%	45%
Phase-in FY 2001 Rates	23.75%	36.83%
Phase-in FY 2002 Rates	27.21%	39.41%
Difference between FY 2000 Full Prefunding and Phase-In Rates	1.25%	8.17%
Difference between FY 2001 Full Prefunding and Phase-In Rates	(2.21%)	5.51%

Note: Rates are employer contribution rates and expressed as a percent of payroll. Rates do not include the retiree health insurance credit, group life, Virginia Sickness and Disability Program, or the five percent member contribution.

Source: JLARC staff analysis of data from the Virginia Retirement System.

**Table 7: Impact on Employer Contribution Rates of Selected Benefit and Policy Changes**

Policy/Benefit Change	State Employees	Teachers
28-Year Amortization of Unfunded Liability	0.07%	0.13%
1.7% Benefit Multiplier	0.37%	0.50%
50/30 Retirement Provision	0.18%	0.25%
<b>Total Impact</b>	<b>0.62%</b>	<b>0.88%</b>

Source: JLARC staff analysis of data from the Virginia Retirement System.

Under previous funding and rate setting policy, the changes to the VRS benefit structure would not have been accounted for in the contribution rates until FY 2003. However, the Board of Trustees was concerned that the delay in recognizing the cost of these changes would ultimately increase the cost to employers. As a result, the Board of Trustees adopted a policy to recognize the costs of these benefit changes in the rates beginning in FY 2001. This new policy should enable a reserve to be established that recognizes the future costs of these benefits and ultimately result in lower or steady contribution rates.

Finally, the Board of Trustees also certified rates for the new Virginia Law Officers' Retirement System (VaLORS). Reflective of the enhanced benefits available to employees through this system, the FY 2001 and FY 2002 VaLORS employer rate of 16.15 percent of payroll is substantially higher than the 6.35 percent rate for other State employees.

### **Most Political Subdivisions Will Experience Rate Reductions in FY 2000 and FY 2001**

More than 500 cities, counties, towns, authorities, and other political subdivisions belong to VRS. The VRS actuary develops employer contribution rates for each individual entity in the same manner as for the VRS, JRS, and SPORS systems. Analysis of the FY 2001 and FY 2002 employer contribution rates indicate that more than 370 political subdivisions will experience rate decreases. In addition, the employer rates for more than 95 percent of the participating political subdivisions will reflect full prefunding of the COLA.

Perhaps more significant, 26 political subdivisions will have employer contribution rates in

FY 2001 and FY 2002 that have been reduced to zero. This is primarily due to the fact these entities elected to fully prefund the COLA at the earliest available opportunity. As a result, these employers are now realizing the full benefit from the recent strong investment performance of the VRS pension fund.

### **VRS Pension Funding Status Continues to Improve**

By two common measures, the funding status of the VRS pension fund continues to improve. The VRS pension fund had assets to cover more than 87 percent of accrued liabilities as of June 1998. For this particular fund, this is a substantial increase over the June 1994 actuarial valuation when assets covered only 73 percent of liabilities. However, the June 1998 funding status for SPORS and JRS, while improving, was 76 percent and 66 percent of actuarial accrued liabilities respectively (Table 8).

Another measure of a pension fund's funding status is the solvency test. The solvency test calculates the portion of accrued pension liability that is covered by assets. Moreover, it does so in a manner that reflects the statutory order of precedence specified in the *Code of Virginia* for distributing trust fund assets in the event of termination of the retirement system. First in the order of precedence is payment to active members of their accumulated member contributions. Second is payment to current retirees and beneficiaries of the actuarial present value of their future retirement benefits. Last in order of precedence is payment to active employees of the actuarial present value of their future retirement benefits.

As illustrated in Table 9, there was a rather steep decline in the funding of accrued future

**Table 8: Funded Ratio of VRS, SPORS, and JRS, June 1994 – June 1998**

<b>System</b>	<b>June 1994</b>	<b>June 1996</b>	<b>June 1998</b>
VRS	73.0%	79.8%	87.8%
SPORS	72.6%	65.5%	75.8%
JRS	57.8%	56.8%	65.7%
Source: Virginia Retirement System			

**Table 9: Results of VRS Solvency Test, June 1992 – June 1998**

Actuarial Valuation Date	Active Member Contributions			Future Benefits for Current Retirees and Beneficiaries			Future Benefits for Current Active Employees		
	VRS	SPORS	JRS	VRS	SPORS	JRS	VRS	SPORS	JRS
June 1992	100%	100%	100%	100%	100%	100%	96.4%	103.7%	49.3%
June 1994	100%	100%	100%	100%	100%	96.9%	46.9%	52.4%	0.0%
June 1996	100%	100%	100%	100%	100%	85.8%	57.9%	34.1%	0.0%
June 1998	100%	100%	100%	100%	100%	100%	75.3%	46.5%	7.7%

Source: Virginia Retirement System.

benefits for active members between the June 1992 and the June 1994 actuarial valuations. This is due to the fact that the June 1994 valuation was performed based on full prefunding of the COLA beginning in FY 1997. However, by the June 1998 valuation, the funding for accrued future benefits had improved substantially for VRS. The improvement for JRS and SPORS has been more moderate. The funding for accrued future benefits for JRS and SPORS will likely improve substantially in the future due to the Board of Trustees' decision to establish fixed contribution rates for these two systems until their funding status improves.

#### **Retiree Health Insurance Credit and Group Life Insurance Rates**

As part of the June 1998 actuarial valuation, new rates for the retiree health insurance credit and the group life insurance program for FY 2001 and FY 2002 were also certified by the VRS Board of Trustees. The rates established for these two employee benefits include the impact of a number of important policy changes approved by the Board of Trustees as well as recent benefit enhancements.

***Retiree Health Insurance Credit Rates.*** Rates certified by the Board of Trustees for the retiree health insurance credit program for FY 2001 and FY 2002 are substantially higher than the rates in effect for FY 2000. Specifically, the rate for State employees increased from 0.68 percent of payroll to 1.57 percent, while the rate for teachers increased from 0.35 percent of payroll to 1.07 percent.

However, a number of factors have contributed to these increases.

First, the 1999 General Assembly increased the monthly maximum health insurance credit payment for State employee retirees from \$2.50 per month to \$4 per month and for teacher retirees from \$1.50 per month to \$2.50 per month. These increases added 0.52 percent to the rate for State employees and 0.23 percent for teachers. Second, the FY 2000 Appropriation Act authorized a "premium holiday" for contributions for the State employee retiree health credit for the last two months of FY 1999 and for the entire FY 2000.

Finally, in 1999, the VRS Board of Trustees adopted a policy that the retiree health insurance credit be funded on an actuarial basis rather than on a pay-as-you-go approach. Under the pay-as-you-go approach, no reserves have been established for the future cost of payments. Prefunding this program will provide a number of important benefits for the system and employers.

First, it should help mitigate future cost increases for the program as the ratio of active members to retirees decreases. Second, it will enable the program to realize the full benefit of the recent strong investment performance of the system's assets. Finally, both VRS and its actuary have reported that the Governmental Accounting Standards Board (GASB) will eventually require that the cost of post-retirement health payments be recognized on a prefunded basis. The State was in a similar situation with the retirement benefit COLA provided to retirees when it

was forced by GASB requirements to retroactively recognize the costs associated with the COLA.

**Group Life Insurance Rates.** The VRS Board of Trustees also certified the rate for the group life insurance program for FY 2001 and FY 2002. This rate, 0.80 percent of payroll, is slightly higher than the 0.72 percent rate calculated for the 1996 actuarial valuation. However, the relatively modest increase in rates masks some important funding implications for the group life insurance program.

First, only once since FY 1990 have the group life insurance rates been funded at the rate determined by the VRS actuary (Figure 1). Moreover, in four years during that time period, no contributions were made to the group life insurance program. The group life program has been able to address these contribution shortfalls through strong VRS investment performance and improving mortality rates.

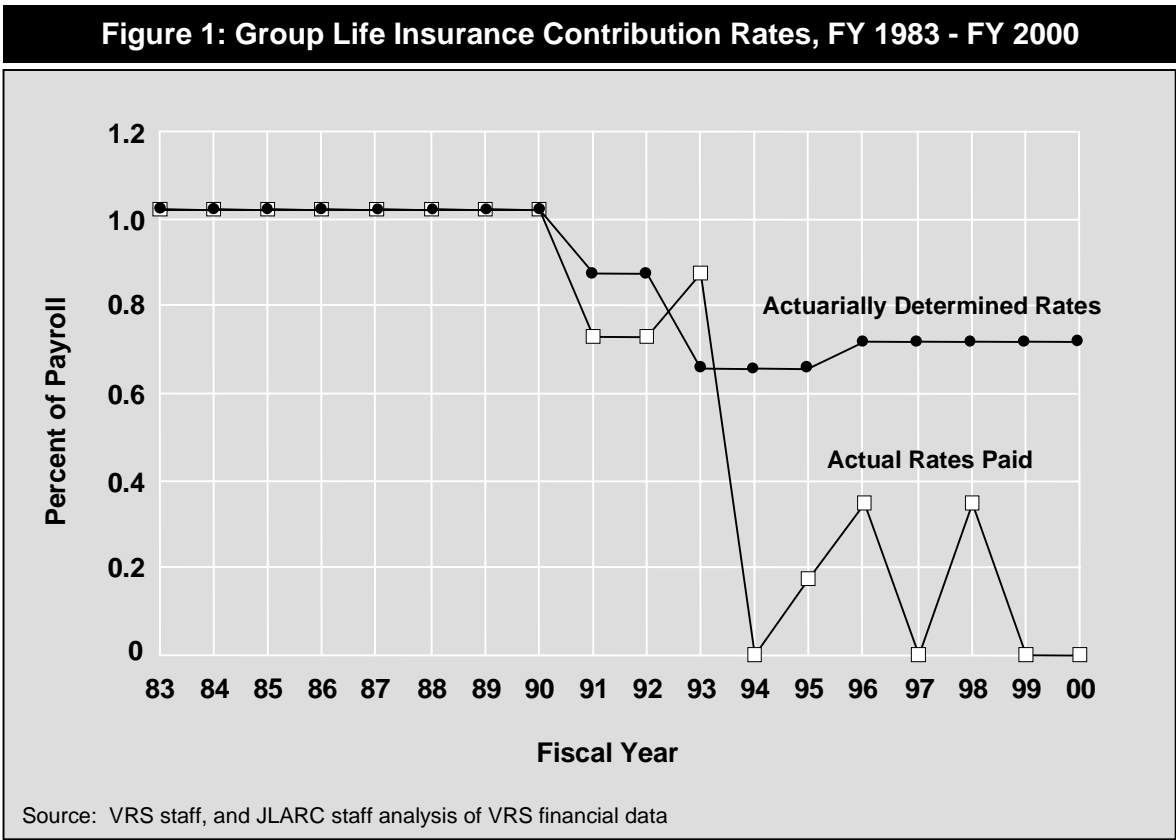
The practical impact of the contribution shortfall is that, had the actuarially determined rates been funded, the retiree life insurance program

would have likely been fully funded as of June 1998. Moreover, VRS' actuary noted that if the contribution rates are not fully funded and the recent strong investment gains do not continue, contribution rates could increase sharply in the next few years.

**MODIFICATIONS TO THE DEFERRED COMPENSATION PROGRAM HAVE RECENTLY BEEN IMPLEMENTED**

VRS has statutory responsibility for administration of the State's deferred compensation program. The program was created in 1980 under the authority granted by section 457 of the U.S. Internal Revenue Code, and is often referred to as a 457 plan. Since its inception, the plan has undergone a number of changes that have been designed to improve administration and increase the utility of the program to participating employees as well as increase program participation by eligible employees.

The most recent changes to the plan's design occurred in 1999. First, VRS expanded the in-



vestment offerings in the plan from eight to 13, providing participating employees with more options for meeting their investment goals. Other benefits such as reductions in investment management fees and enhanced program oversight were also realized. Finally, the 1999 General Assembly authorized and funded an employer cash match program for participating employees that will begin in early 2000.

### **Deferred Compensation Program Participation Has Increased Since FY 1990**

Participation in the deferred compensation program, as measured by both the number of participants and the actual rate of participation, has continually increased. Since FY 1990, the number of employees participating in the program increased from 4,111 to 14,445 in FY 1999. Furthermore, for each fiscal year, the number of employees participating increased over all previous fiscal years during that period.

In addition to the increase in the absolute number of employees participating in the deferred compensation program, the percentage of eligible employees participating has increased. For purposes of the State's defined contribution program, eligible employees do not include individuals who are also eligible to participate in 403(b) plans sponsored by institutions of higher education. In FY 1991, the program's participation rate was eight percent. This increased to 12.2 percent in FY 1995. By FY 1999, the participation rate had increased to 17.4 percent.

### **Recent Modifications Designed to Enhance Deferred Compensation Program Structure**

During 1999, VRS implemented significant revisions to the deferred compensation program. The single most obvious change to the program was to the investment option structure. The number of investment options was increased from eight to 13. In addition, the management fees for the investment options were reduced substantially and the new investment structure should improve VRS program administration and oversight. Finally, VRS anticipates adding a fourth tier to the deferred compensation program enabling participants to have access to retail mutual funds and possibly other investment options.

**Number of Plan Investment Options Has Been Increased.** Prior to the recent modifications to the program, there were eight investment options available through the State's deferred compensation program. These options were generally a mix of passive and active public equity and fixed income funds. However, most of the funds were actively managed with only one passive public equity fund. This limited a participant's ability to construct a broad portfolio comprised of passive or active funds, or a combination of both.

In the new program structure, tiers, which represent the structure and management styles of the individual funds, group the 13 investment options. Specifically:

- **Tier I: Asset Allocation Funds** - These funds are designed for participants who want to make a single decision about their investment program. Three funds are currently offered in this tier. Each fund is a predetermined mix of U.S. and non-U.S. equities and fixed income. The funds are automatically rebalanced by the managers to remain within their asset allocation guidelines. These funds are passively managed.
- **Tier II: Passively Managed Funds** - Four funds offered through this tier track a predetermined index and are passively managed. Unlike Tier I fund offerings, participants are required to select their desired asset allocation. In addition, participants are required to determine when, and if, to rebalance their portfolio.
- **Tier III: Actively Managed Funds** - Six funds offered through this tier are actively managed with a goal of outperforming established investment benchmarks. Participants determine their desired asset mix and when, and if, to rebalance their portfolio. Due to active management, investment management expenses are higher than Tier I and II investment options.

By grouping the investment options in these categories, participants can more readily identify the different investment philosophies and management styles of the program's 13 offerings (Table 10). Finally, the names of the funds are

**Table 10: Deferred Compensation Program Investment Options**

<b>Fund/Manager</b>	<b>Management Style/Investment Strategy</b>
<b>Tier I: Asset Allocation Funds</b>	
<i>VRS Income &amp; Growth Fund</i> / State Street Global Advisors	Passive/ Fixed asset allocation: 75% U.S. bonds, 22% U.S. equities, and 3% non-U.S. equities
<i>VRS Balanced Growth Fund</i> / State Street Global Advisors	Passive/ Fixed asset allocation: 50% U.S. bonds, 43% U.S. equities, and 7% non-U.S. equities
<i>VRS Long-Term Growth Fund</i> / State Street Global Advisors	Passive/ Fixed asset allocation: 25% U.S. bonds, 64% U.S. equities, and 11% non-U.S. equities
<b>Tier II: Passively Managed Funds</b>	
<i>Bond Index Fund</i> /State Street Global Advisors	Passive/ Match the performance of the Lehman Brothers Aggregate Index.
<i>S&amp;P 500 Index Fund</i> /State Street Global Advisors	Passive/ Match the performance of the S&P 500 Index
<i>Small/Mid Cap Equity Index Fund</i> / State Street Global Advisors	Passive/ Match the performance of the Russell Special Small Company Index
<i>International Equity Index Fund</i> / State Street Global Advisors	Passive/ Match the performance of the MSCI EAFE index
<b>Tier III: Actively Managed Funds</b>	
<i>Money Market Fund</i> /State Street Global Advisors	Active/ Provide current income while preserving capital
<i>VRS Bond Fund</i> /Pacific Investment Management Company	Active/ Provide returns that exceed the Lehman Brothers Aggregate Index
<i>Stable Value Fund</i> /State Street Research and Management Co. and MetLife	Active/ Achieve total returns that are competitive with the Lehman Brothers Intermediate Government/Corporate Bond index returns
<i>VRS Large Cap Equity Fund</i> /Credit Suisse Management, Fidelity, J.P. Morgan Investment Management, and State Street Global Advisors	Active/ Long-term returns that exceed the performance of the S&P 500 Index
<i>VRS Small/Mid Cap Equity Fund</i> / Goldman Sachs Asset Management and State Street Global	Active/ Long-term returns that exceed the performance of the Russell Special Small Company Index
<i>VRS International Equity Fund</i> / T. Rowe Price	Active/ Long-term returns that exceed the performance of the MSCI EAFE index
Source: JLARC staff analysis of VRS documents.	

relatively generic and linked specifically with their objectives. In the past, the title of the program's funds tended to include the names of the money management or mutual fund firms. As a result, investment options may have been selected based on the firm's name and not the fund's investment objective. VRS staff also believe that the new fund names will encourage participants to more fully understand what they are investing in and assist them in managing their portfolios.

***Investment Management Fees Will Be Reduced and Program Oversight Will Be Enhanced.***

Another important benefit that resulted from the restructuring of the deferred compensation plan was a substantial reduction in investment management fees charged to plan participants. Investment management fees are in addition to the fees assessed by the third party administrator. In the new program, most of the investment options available to participants are managed by firms that also have contracts with VRS to manage investment portfolios for the pension fund. VRS was able to negotiate fees for the deferred compensation plan that reflect the fees that these managers also receive for managing some VRS pension fund assets.

The impact of reduced fees on the deferred compensation program is significant. For example, VRS was able to reduce the investment management fee for the passively managed S&P 500 Index Fund from 0.07 percent to 0.02 percent. Based on assets in this fund on July 31, 1999, VRS determined that the total savings to participants in this fund from the reduction in the management fees would have exceeded \$23,000. Fees for other funds were reduced substantially as well. Total savings across all of the investment options available on July 31, 1999 would have exceeded \$225,000. This is essentially additional money that deferred compensation plan participants will be able to keep invested in their plans.

Finally, program oversight should be strengthened with the restructuring and the addition of the new participant investment options. For example, VRS professional investment staff will review and perform due diligence of the same investment managers for the VRS pension fund. In addition, VRS will have more control over the deferred compensation plan managers' invest-

ment practices than was available for the previous retail-oriented investment options. For example, VRS staff will be in a position to ensure that investment style drift does not occur in the plan's investment offerings.

***Fourth Tier Will Eventually Be Added to the Plan.*** When VRS began reviewing and restructuring the deferred compensation plan, it was anticipated that a fourth tier would be available to participants. A fourth tier may enable participants, for example, to direct their deferred compensation plan assets to participating retail mutual funds. Guidelines and parameters will likely be placed on utilization of the fourth tier. Nonetheless, it will substantially expand the investment options available in the State's deferred compensation plan.

Implementation of the fourth tier has been delayed for two primary reasons that are beyond the control of VRS. First, the current third party administrator was recently purchased by another company. Second, the information systems changes necessary to implement the fourth tier were placed on hold by the third party administrator pending the completion of the administrator's Year 2000 computer programming efforts.

***Employer Cash Match Program Will Likely Increase Program Participation***

A significant employee benefit related to the deferred compensation plan was passed by the 1999 General Assembly and becomes effective during FY 2000. This benefit was the establishment of an employer cash match program for employees participating in both the State's deferred compensation program and employees who participate in tax sheltered annuity or 403(b) plans which are typically offered by higher educational institutions. The employer cash match program was apparently implemented to encourage employees to save for their retirement.

Eligibility requirements for employees to participate are minimal and relatively straightforward. Employees must have at least 12 months of consecutive service and defer at least \$10 per pay period to the State's deferred compensation plan or a 403(b) plan. There is no vesting period for the employer provided contribution. The

employer match program will be administered by VRS for employees contributing to the deferred compensation plan or by the employers sponsoring the 403(b) plans. The employer match will be deposited into a 401(a) plan established by VRS or employers sponsoring the 403(b) plans.

Section 51.1-606 of the *Code of Virginia* establishes the maximum employer contribution for the cash match per pay period as “the lesser of fifty dollars or fifty percent of the amount that the qualified participant voluntarily contributes...” However, the actual amount of the employer cash match established in FY 2000 will be determined in part on the \$2.5 million appropriated by the 1999 General Assembly for this program.

To implement the employer cash match program, the VRS Board of Trustees has adopted an employer cash match rate of \$10 per pay period (\$20 per month). The Board noted that by initially establishing the employer match at the rate of \$10 per pay period, the State would have substantial flexibility in determining whether and when, based on employee participation and funding, to raise the employer contribution rate in the future.

Moreover, VRS provided data to the Board that indicates other states experienced a substantial increase in employee participation when an employer cash match program was implemented. For example:

*The State of Oklahoma implemented an employer cash match for its employee*

*deferred compensation plan in January 1998. The employer match was established at \$25 per month if the employee contributed at least \$25 per month. Participation increased from 20 percent of eligible employees to 78 percent.*

\* \* \*

*The State of Tennessee implemented an employer cash match for employees participating in the deferred compensation plan. The employer match is up to \$20 per month if the employee contributes \$20 month. Since implementation of the employer cash match program, the employee participation rate increased from 20 percent to almost 50 percent of eligible employees.*

VRS staff anticipate that based on other state’s experiences, employee participation rates in Virginia will likely increase rapidly, which was in part the intent of the cash match program. With the employer match rate set at \$10 per pay period, an employee participation rate in Virginia of 60 to 70 percent would require between \$15.3 million and \$17.8 million of funding annually. An employer match rate of \$25 per pay period with an employee participation rate of 60 to 70 percent would require between \$38.2 million and \$44.5 million annually. Therefore, substantial flexibility in establishing the future employer contribution rate to match available State funding will be necessary.

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