VRS OVERSIGHT Report

JOINT LEGISLATIVE AUDIT & REVIEW COMMISSION
OF THE VIRGINIA GENERAL ASSEMBLY

VRS Biennial Status and Semi-Annual Investment Report, December 2004

Profile: Virginia Retirement System Investments (as of September 2004)

Market Value of Assets: **$39.99 billion**

Number of External Managers:
Public Equity – 24 Fixed Income - 6

Number of External Investment Accounts:
Public Equity – 33 Fixed Income - 6

Total Return on Investments			
10 years	*5 years*	*3 years*	*1 year*
10.1%	**4.1%**	**7.3%**	**14.4%**
Performance/Intermediate Benchmark			
9.5%	**3.3%**	**7.1%**	**13.9%**

Time periods ending 9/30/2004

Number of VRS Investment Department Staff:
40 FTE and 1 wage (10 FTE and 1 wage vacant)

FY 2004 Investment Expenses: $118.3 million (29.6 basis points)

FY 2004 Investment Department Operating Expenses: $6.7 million (1.7 basis points)

Investment Policy Indicators (as of September 30, 2004)

	Asset Allocation (% of Total Assets)		*Asset Allocation* (% of Asset Class)		*Type of Management* (% of Asset Class)	
Asset Class	**Target**	**Actual**	**Domestic**	**Non-U.S.**	**External**	**VRS**
Public Equity	**65.3%**	**65.2%**	**69.0%**	**31.0%**	**76.0%**	**24.0%**
Fixed Income	**20.0%**	**19.7%**	**97.5%**	**2.5%**	**63.3%**	**36.7%**
Hedge Funds	**3.4%**	**3.4%**	**81.0%**	**19.0%**	**100%**	**0%**
Private Equity	**4.8%**	**4.8%**	**82.5%**	**17.5%**	**100%**	**0%**
Real Estate	**3.8%**	**3.8%**	**96.0%**	**4.0%**	**100%**	**0%**
High Yield	**2.4%**	**2.4%**	**90.0%**	**10.0%**	**100%**	**0%**

Introduction

In 1993, House Joint Resolution 392 directed the Joint Legislative Audit and Review Commission (JLARC) to complete a comprehensive study of the Virginia Retirement System. The study focused on the structure and governance of the system, investment practices and performance, and the actuarial soundness of the retirement funds. In January 1994 JLARC issued the report, *Review of the Virginia Retirement System*. Overall, the JLARC staff and consultants found the Virginia Retirement System to be financially sound and the system assets to be well managed. However, concerns about the governance of the system were well founded and the report recommended several actions to strengthen the independence of the retirement system.

The report recommended that the VRS be established as an agency independent of the executive branch, and that the appointment of trustees should be the shared responsibility of the Governor and the General Assembly. The report also recommended that the VRS trust funds be established as independent trusts in the *Constitution of Virginia*. In addition, the structure of the advisory committees should be established in law. It was recommended that the General Assembly establish permanent oversight of the retirement system. In addition, the actuarial consultant, hired by JLARC, found that the pay-as-you-go funding of the cost of living adjustments could cause future increases in contribution rates. Accordingly, the report recommended that the General Assembly address this issue.

Ten years have passed since the 1994 report and most of the recommendations in the 1994 report have been implemented (see Appendix table). This issue of the Biennial Status and Semi-Annual Investment Report, required by the Virginia Retirement System Oversight Act (Section 30-78 et seq. of the *Code of Virginia),* gives an overview of the major developments at the VRS over the course of the past ten years. This report includes both the semi-annual investment report for December 2004 and the fourth biennial status report. The first section of this report provides an overview of VRS. The second section addresses the investment program. Subsequent sections of this report focus on the administrative aspects of VRS' program, including benefit changes and enhancements, technology, actuarial soundness of the fund, and an upcoming leadership change at VRS.

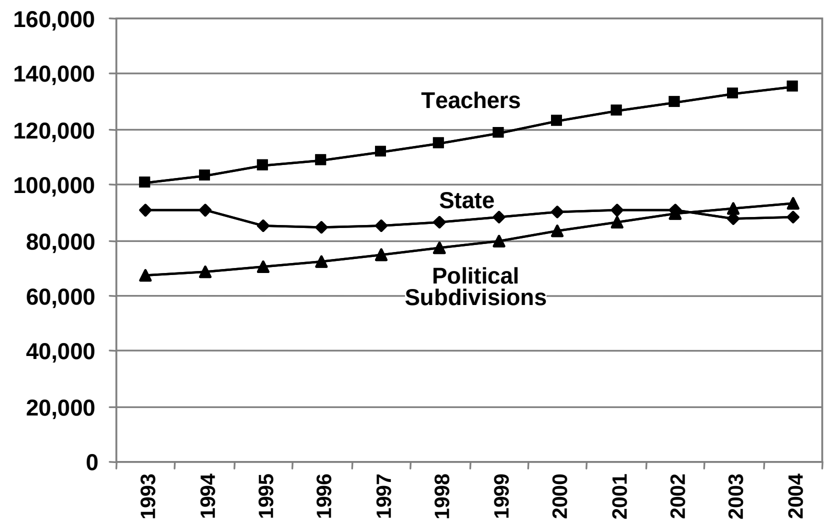
Overview of the Virginia Retirement System

The *Constitution of Virginia* (Article X, Section 11) requires that the General Assembly maintain "…a retirement system for State employees and employees of participating political subdivisions. The funds of the retirement system shall be deemed separate and independent trust funds, shall be segregated from all other funds of the Commonwealth, and shall be invested and administered solely in the interests of the members and beneficiaries thereof. " The Virginia Retirement System was established in 1942 to administer a statewide retirement system. Today, this includes 234 State agencies, 151 cities and towns, 92 counties, 321 school boards and special authorities. As of June 30, 2004, VRS had more than 317,000 active members and almost 114,000 retirees and beneficiaries (see

Figures 1 and 2). As shown in Figure 1, State employees have become the smallest active member group with teachers and employees of political subdivisions growing at a faster rate. The number of State employees has essentially been level for the past ten years (90,762 in FY 1994 and 88,637 in FY 2004). Thirty-five percent of active members are more than 50 years of age and 52 percent of active members are between 30 and 50

Figure 1

VRS Active Membership Data, 1993 - 2004

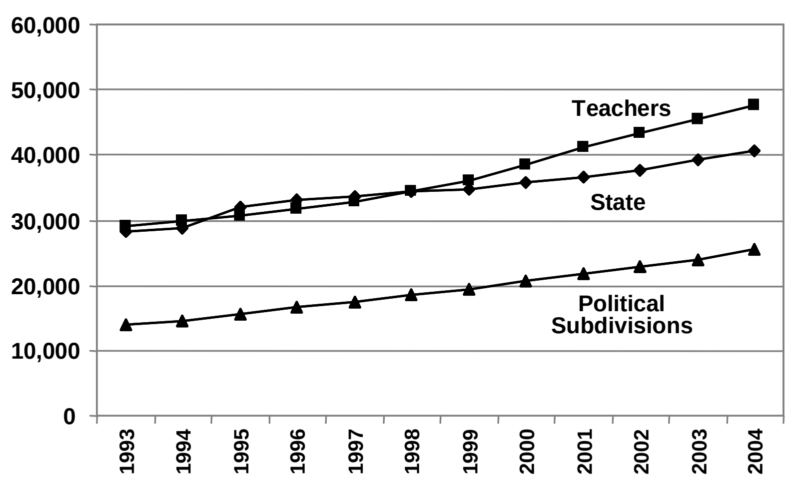


Note: "State" includes State employees, SPORS, VaLORS, and JRS.

Note: The source for all figures in this report is JLARC staff analysis of VRS data.
All years are Fiscal Years except as noted.

Figure 2

VRS Retirees 1993 - 2004



Note: "State" includes State employees, SPORS, VaLORS, and JRS.

years old. VRS is the 30th largest public or private pension fund in the United States and the 47th largest internationally.

VRS administers several retirement systems: the VRS for State employees, teachers, and employees of political subdivisions; the Virginia Law Officers' Retirement System (VaLORS) for certain designated State employee groups such as correctional officers and the Capitol Police; the State Police Officers' Retirement System (SPORS) for sworn State police officers; and the Judicial Retirement System (JRS) for State judges, Commissioners of the State Corporation Commission, and the Virginia Workers' Compensation Commission. Local governments may provide benefits equivalent to SPORS for their firefighters and law enforcement offices. This coverage, called LEOS, is a local option for police, deputy sheriffs, firefighters, regional jail officers and superintendents. All sheriffs have Local Enforcement Officers Retirement System (LEOS) coverage. VRS also manages the group life insurance, retiree health care credit, disability, deferred compensation programs, several optional retirement plans, and the Volunteer Firefighters' and Rescue Squad Workers' Award Fund.

VRS remains unique in its organizational and leadership structure. The National Association of State Retirement Administrators (NASRA) surveyed 53 retirement systems with assets between $5 and $75 billion. Of the 53, only 5, including VRS, have the Chief Investment Officer (CIO) and Director reporting directly to the Board.

VRS annually participates in a cost effectiveness comparison study conducted by Cost Effectiveness Measurement, Inc. (CEM). Fifty-two large pension systems in the United States, the Netherlands, Australia, and Canada participate in the study. The systems include CalPERS, CalSTRS, Idaho PERS, Illinois MRF, Michigan MERS and ORS, Kansas PERS, North Carolina RS, New York State and Local, South Carolina RS, Texas MRS, and Washington State DRS. According to the most recent CEM report, the total adjusted administration cost per active member and annuitant for VRS was $36, which was below the peer average of $65. VRS' total service score was 72 and the peer average service score was 71. According to the CEM data, VRS is providing service equivalent to the average participating peer system in the study, but at a lower cost per member or annuitant.

Classified employees at VRS have increased from 117 in FY 1994 to 222 in FY 2004 or an almost 90 percent increase in 10 years. Over this same period, there was a 28 percent increase in the total number of active and retired members. However, the number of retirements processed annually has increased from 4,043 in FY 1994 to 8,920 in FY 2004 or an increase of 121 percent.

Semi-Annual Investment Report, December 2004

The VRS' investment philosophy is to diversify the portfolio using multiple asset classes in order to maximize investment returns while controlling risk within an acceptable range. A majority of the fund's assets is invested in publicly traded, reasonably liquid securities, such as stocks and high quality bonds. These markets are somewhat efficient and the fund employs both passive and active strategies in order to keep investment management costs low. VRS also invests in a number of alternative investments that are less liquid and less efficient, but offer the potential for higher returns. These alternative investments include real estate, private equity, credit strategies, and hedge funds.

As of September 30, 2004, the market value of the VRS pension fund was $39.99 billion. The return for the fiscal year-to-date is 0.8 percent and 14.4 percent for the one-year period ending September 30, 2004 (Table 1). The fund's performance exceeded established benchmarks for the one-, three-, five-, and ten-year periods ending September 30, 2004. However, during the three- and five-year periods ending September 30, 2004, the VRS' investment return fell short of the actuarially assumed investment rate of return of eight percent.

Table 1

VRS Investment Performance for Period Ending September 30, 2004

Program/ Performance Objective	*Fiscal Year to Date*	*Prior 1 Year*	*Prior 3 Years*	*Prior 5 Years*
Total Fund	*0.8%*	*14.4%*	*7.3%*	*4.1%*
VRS Performance Benchmark – Intermediate	0.3%	13.9%	7.1%	3.3%
VRS Performance Benchmark- Long Term	-0.3%	11.6%	6.0%	2.6%
Total Public Equity	*-0.6%*	*17.5%*	*7.5%*	*0.5%*
Public Equity Custom Benchmark	-1.0%	16.9%	7.3%	0.5%
Total Fixed Income	*3.2%*	*4.3%*	*6.1%*	*7.7%*
Lehman Total VRS Custom	3.2%	3.7%	5.8%	7.5%
Total Private Equity	*3.9%*	*23.9%*	*2.3%*	*13.3%*
Private Equity Custom Benchmark	1.9%	23.2%	2.8%	1.5%
Total Real Estate	*5.2%*	*15.0%*	*11.7%*	*11.6%*
Real Estate Custom Benchmark	4.5%	14.2%	10.1%	11.2%
Total Hedge Funds	*1.4%*	9.6%	n/a	n/a
Custom Hedge Funds Benchmark	0.6%	*6.9%*	*n/a*	*n/a*
Total High Yield	3.4%	n/a	n/a	n/a
VRS Custom Yield Benchmark	3.2%	*n/a*	*n/a*	*n/a*

Source: JLARC staff analysis of VRS data.

Public Equity. The public equity program continues to be VRS' largest asset class comprising 65.2 percent of the portfolio or $26.1 billion. The public equity program reported positive returns and met or exceeded established benchmarks for the one-, three-, and five-year periods ending September 30, 2004.

Fixed Income. The objectives of the fixed income program are to reduce total fund risk through lower volatility, lower correlation, higher income, and the provision of a deflation hedge. The fixed income program generated positive returns (3.2 percent, 4.3 percent, 6.1 percent, and 7.7 percent respectively) for fiscal-year-to-date-, one-, three-, and five-year periods ending September 30, 2004. The program also met or exceeded its benchmark in all of these periods.

Private Equity. VRS invests in private equity to accomplish two primary objectives – to provide enhanced returns relative to the public equity program and to diversify the overall retirement fund. While private equity can provide higher returns, it also has higher risks, is less liquid than public equity, and typically has higher fees than the traditional asset classes. The private equity program exceeded its benchmark for the fiscal-year-to-date, one-year, and five-year periods ending September 30, 2004, but did not meet its benchmark for the three-year period. In the five-year period ending September 30, 2004, the program substantially exceeded its benchmark (13.3 percent versus 1.5 percent). The annualized dollar-weighted performance as of June 30, 2004, since the inception of the program in April 1989, was 23.71 percent. The program's performance (23.71 percent), exceeded its benchmark, the dollar-weighted Russell 3000 plus 250 basis points, which was19.75 percent for the same period.

High Yield. The current high yield program started on July 1, 2004. The high yield program, as of September 30, 2004, has $944 million in assets and represents 2.4 percent of the total fund. The program exceeded its benchmark for the fiscal-year-to-date period ending September 30, 2004 (3.4 versus 3.2 percent).

Hedge Funds. In general, the overall goal of the hedge fund program is to provide better risk-adjusted returns. In addition, hedge funds have historically shown a low correlation to other asset classes, such as fixed income and equities, thereby providing additional diversification benefits to the fund. As of September 30, 2004, the total appreciated value of the hedge fund program was $1.343 billion, representing 3.4 percent of the total VRS portfolio. The hedge fund program outperformed its benchmark for the fiscal-year-to-date- and one-year period ending September 30, 2004. Since the inception of the program on July 1, 2003, and running through September 30, 2004, the hedge fund program returned 8.7 percent on an annualized basis versus 6.9 percent for the custom benchmark. Over the same time period, the Public Equity Custom Benchmark returned 17.8 percent, the Lehman Total VRS Custom Benchmark or fixed income benchmark returned 2.8 percent, the Private Equity Custom Benchmark returned 33.6 percent, and the Real Estate Custom Benchmark returned 14.9 percent. The VRS Board of Trustees has approved increasing the hedge fund program up to 5 percent of total assets, or an increase of approximately $650 million from current funding levels. Staff at VRS estimate that by investing as opportunities present themselves, the program will likely pass the $1.5 billion level by the first quarter of calendar year 2005.

Real Estate. The VRS real estate program outperformed its benchmark for the fiscal-year-to-date-, one-, three-, and five-year periods ending September 30, 2004. As the real estate program has been undergoing a number of changes and has been in a period of transition, a more detailed discussion of the real estate program is included below.

In August 2004, the VRS hired a new Director of Real Estate Investments. As reported previously, the new manager was hired to develop and restructure the real estate portfolio. At the November 2004 Investment Advisory Committee and VRS Board meetings, the new director presented an outline of the intended general direction of the program. Overall, he noted that real estate provides attractive returns, offers diversification benefits, and serves as an inflation hedge. At present, a great deal of capital from public and private pension funds as well as endowments is flowing into the real estate market and these funds are competing to find strong real estate investment opportunities. The director noted that the program will strive to make investments that generate a good return at an appropriate risk level. In other words, if the fund takes risks, then the fund would expect to be compensated with higher returns to justify the amount of risk taken.

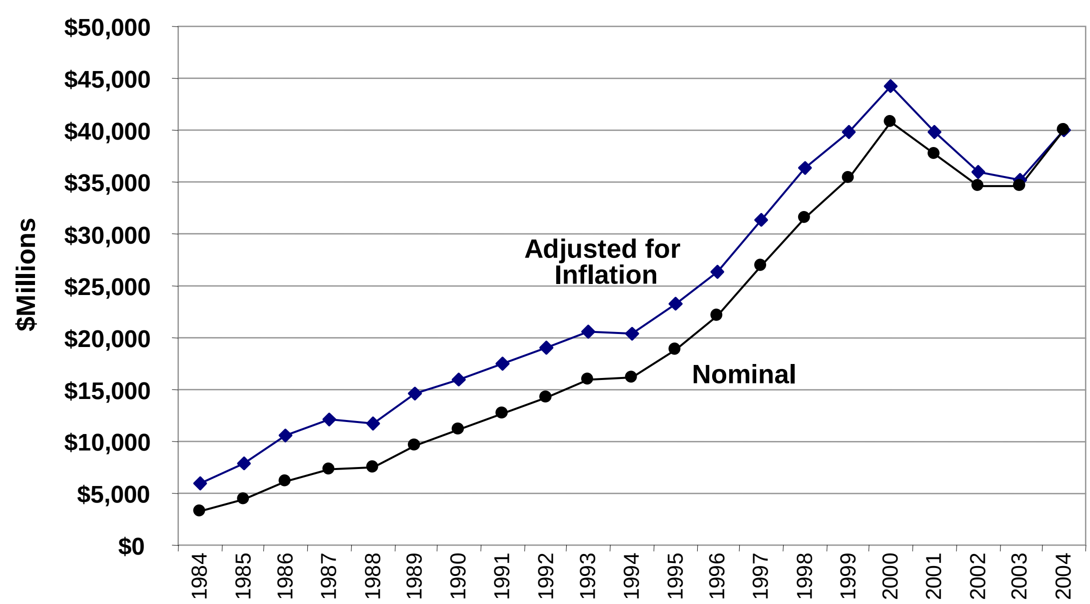
Some of the other ideas that the real estate director discussed included viewing real estate investments from a total fund perspective, investing opportunistically by remaining cognizant of valuations and trying to buy at the right price, exploring the full frontier of real estate opportunities, increasing the program's Real Estate Investment Trust (REIT) exposure, adding income oriented investments, using selective growth investing where appropriate, and engaging in strategic portfolio tilts (for example, investing in particular regions or property types). While the value of REITs may be high at present, securitized real estate or investing in the public real estate market offers liquidity in an otherwise illiquid asset class. In addition, investing in real estate provides diversification benefits. Further, over the last five or more years, REITs have generally outperformed the private real estate market. Accordingly, VRS will focus on trying to increase the publicly traded portion of the real state portfolio or increasing the percentage of the portfolio that is invested in REITs. Currently, real estate fundamentals, such as high vacancy rates, are weak relative to valuations and pricing. In light of high market valuations, VRS will likely continue to be a net seller in this market environment. However, VRS will continue to look for strong opportunities in both the REIT and the broader real estate markets.

VRS Hires RiskMetrics Group to Assist with Total Fund Risk Management. In an effort to achieve greater transparency and to provide total plan aggregated risk reporting, the VRS hired RiskMetrics Group, a New York firm. The goal of this effort is to be able to review the risk profile of the entire pension plan on a single risk platform, which will assist VRS staff in refining their existing risk budgeting processes. Managers in all asset classes used by VRS will be asked to provide portfolio holdings to RiskMetrics, which will in turn build a risk measurement system for the entire VRS plan. In contrast to publicly traded assets, the nature of the alternative investment business and its managers (hedge funds, real estate, and private equity) tends to be less transparent. However, VRS is working toward providing a reasonable representation of the risk exposures to RiskMetrics using a combination of modeling and direct reporting. VRS staff are also working with RiskMetrics to make sure that the new risk reporting process is both reasonable and representative. VRS plans to have the first report, using June 2004 data, prepared by the end of the first quarter of calendar year 2005. Over time, VRS plans to have RiskMetrics develop reports on a quarterly or monthly basis.

VRS Fund Growth. Figure 3 displays the growth in the VRS fund from 1984 through FY 2004, in both nominal and inflation-adjusted dollars. Over this period, the fund grew from \$3.3 billion to \$40 billion. Even with the adjustment for inflation to 2004 dollars, the growth trend remains essentially the same. As the majority of the fund is invested in the equity market, unstable market conditions in 2001 through 2003 resulted in losses in the market value of assets. Due to strong returns in FY 2004 (17.9 percent), the fund has almost returned to the level where it had peaked in 2000. However, as this is a mature fund, drawdowns on the fund are increasing as more participants are reaching retirement. Analysts, the VRS Investment Advisory Committee, and VRS staff do not expect to ex-

Figure 3

Market Value of VRS Fund, 1984 –2004



perience the gains that were realized in the late 1990s and thus forecast lower returns going forward.

Program Changes and Benefit Enhancements Continue to Increase Work Volume and Complexity of Administration

Since 1994, many changes have been made to the benefits and programs administered by VRS. These changes range in complexity from relatively minor technical clarifications to the establishment of entirely new programs such as the Virginia Law Officer's Retirement System (VaLORS), the Virginia Sickness and Disability Program, and the Cash Match Plan. In some cases, such as the effort to streamline the purchase of service program, considerable effort was expended by VRS to manage the influx of inquiries about applications for the program. Table 2 provides a broad overview of the major benefit changes at VRS from 1994 through 2004. The folowing sections highlight in greater detail changes in selected programs.

VRS Adds Oversight and Administration of the Optional Retirement Plan for Higher Education. The Optional Retirement Plan for Higher Education was established in 1985 with the first participants electing the plan in 1986. VRS became responsible for the operation of the plan in July 2000. Since taking responsibility for the plan, VRS updated the plan document and Master Trust and received a favorable IRS ruling; reviewed and modified the investments and providers available in the plan; published an Investment

Table 2	
Major Benefit Changes at VRS 1994 - 2004	
1994	Retirement with unreduced benefits at age 50 years with 20 years of service if the employee is involuntarily terminated (covers agency heads; city managers; county administrators, executives, and managers; town managers; and school superintendents.)
1995	Early retirement with reduced benefits authorized at 50/10 Optional life insurance program established Workforce Transition Act
1996	Retiree health care credit for teachers made mandatory, with cost to be paid by State (effective 7/1/98)
1998	Virginia Sickness and Disability Program (VSDP) for State employees authorized (effective 1/1/99) Optional Retirement Plan for Political Appointees: A defined contribution retirement plan authorized for gubernatorial appointees and certain employees of the Office of Attorney General. Optional Retirement Plan for School Superintendents: A defined contribution retirement plan authorized for local school superintendents.
1999	Single benefit formula with a multiplier of 1.7 of average final compensation established. Minimum age and service requirements for full retirement benefits reduced from 55/30 to 50/30 for State employees and teachers (optional for political subdivisions) Virginia Law Officers' Retirement System established (effective 10/1/99) Volunteer Firefighters' and Rescue Squad Workers' Award Fund authorized (effective 7/1/00) State employee and teacher retiree health insurance credit increased Employer-match for the State employee deferred compensation program authorized (effective 1/1/00)
2000	Retired local officers (treasurer, commissioner of revenue, attorney for the Commonwealth, clerk of a circuit court, or sheriff of any city or county) receive State funded health insurance credit. VRS has responsibility for centralized administration and oversight of the Optional Retirement Plan (ORP), including the college and university ORP. A new self-directed investment option is available for employees who participate in the Deferred Compensation Plan. The employer, rather than the employee, is required to pay for any oversight of the Deferred Compensation Plan by VRS.
2001	Purchase of service streamlined Partial Lump-Sum Option Payment (PLOP): allows members who work beyond their normal retirement age to elect a lump-sum distribution up to 36 times their monthly retirement allowance in a single lump-sum payment at the time of retirement. Leveling option eliminated (effective July 1, 2001) Under limited circumstances, such as critical shortage areas, retired teachers and school administrators may draw their retirement benefits and continue to work full-time. *(Table continues)*

	A higher multiplier of 2.0%, instead of 1.7%, for all newly enrolled employees in VaLORS. The current supplement for VALORS is repealed, but all current VaLORS covered employees are given the option to elect the new multiplier in lieu of the current multiplier and supplement. (Must make election by October 1, 2001)
2002	VSDP Benefit Enhancements • A second open enrollment for VSDP took place in fall of 2002. In addition, all state employees will be covered under VSDP unless they opt out of the program during the enrollment period. • All VSDP participants receive long-term care coverage Deferred Compensation and Cash Match Plans • The 12-month waiting period for the Cash Match Plan for those employees participating in the Deferred Compensation Plan has been eliminated. • All employees, including wage employees, can now participate in the Deferred Compensation Plan. The death benefits of the LEO/FIRE section of the *Code* now match those under SPORS and VaLORS. Cost of teacher health care credit incorporated into Department of Education SOQ costs.
2003	Advance Pension Option: temporarily increases benefits from the date of retirement to at least age 62, but no later than unreduced retirement age for social security benefits. Purchase of Service: School Superintendents may purchase up to 10 years of retirement service credit for prior service for the Commonwealth or another state (this is in addition to the 4 years that may be purchased as public service) State police officers in service at age 60 or older with five or more years of service may elect to retire and continue to receive their retirement allowance while employed as an employee of the Department of State Police (DSP). The individual may not receive a retirement allowance while an employee at DSP for more than 2 years. VRS may charge and collect administrative fees to pay its costs incurred in administrating and overseeing any retirement plan or service award fund other than the Virginia Retirement System, State Police Officers' Retirement System, Virginia Law Officers' Retirement, or the Judicial Retirement System.
2004	Virginia Supplemental Retirement Plan: A defined contribution retirement plan authorized by local school boards to provide enhanced retirement benefits to the middle school teacher corps and turnaround specialists in schools not meeting minimum standards. For members in service on July 1, 2002, the five-year hazardous duty vesting requirement under VaLORS, SPORS, and LEOS was removed. Service rendered prior to October 1, 1999, in a position that is now a VaLORS covered position, to be considered hazardous duty for purposes of the law enforcement hazardous duty supplement.

Source: JLARC staff analysis of *Code of Virginia*, Appropriation Acts, and VRS documents.

Policy Statement and Summary Plan description; and published forms and procedures necessary for the operation of the plan. In addition, VRS has established procedures whereby institutions may establish their own ORPs, and several larger institutions have opted out of the VRS ORP in favor of administering their own ORP plans. George Mason University, Virginia Tech, Virginia Commonwealth University, and the University of Virginia have opted out of the VRS plan in favor of administering their own plans. At larger institutions, 80 to 95 percent of eligible employees choose an ORP. At smaller institutions, including community colleges, the rate is between 10 and 50 percent.

Under §51.1-126 of the *Code of Virginia*, the contribution by the Commonwealth on behalf of an employee participating in an optional retirement plan maintained by the Board or on behalf of an employee participating in an optional retirement plan established by his institution is 10.4 percent of creditable compensation. An institution of higher education may make an additional contribution for participants who, before January 1, 1991, exercised the election to participate in the plan provided by the institution employing them. Such additional contributions shall be made using funds other than general funds, tuition or fees, up to an additional 2.17 percent of creditable compensation. As of July 2004, there were 3,893 participants in the VRS ORP Plan. Another approximately 7,500 employees participate in plans administered by their own higher education institutions.

Since taking over the ORP, VRS has allowed for input from participating institutions, simplified investment choices for participants, ensured compliance with the Internal Revenue Service, increased due diligence, and worked to ensure proper fiduciary responsibility for the Plan.

Volunteer Firefighters' and Rescue Squad Workers' Service Award Fund Appears to Be Underutilized and Costly to Administer. In 1999, the General Assembly created the Volunteer Firefighters' and Rescue Squad Workers' Service Award Fund (§51.1-1200), which became effective January 1, 2001. This fund was established to provide service awards to eligible volunteer firefighters and rescue squad workers who elect to become members of the fund. The Volunteer Firefighters' and Rescue Squad Workers' Service Award Fund Board manages the fund, and the Virginia Retirement System assists in maintaining and investing the fund.

Members of the fund may voluntarily contribute to it and these contributions may be supplemented by State general funds, if there is an appropriation to do so; however, no supplemental general funds have been contributed to date. Additional contributions to the fund may also be made by individual fire departments or rescue squads, local governments, or other sources. Members contribute $30 per quarter. Members may also purchase prior service. Any member who is 60 years of age and who has at least ten years of creditable service is entitled to a distribution from the fund equivalent to the contributions he has made, the appropriate matching contributions made on his behalf, and any investment gains on such contributions less losses. Other distributions for eligible volunteers who are 60 years of age and have at least five but less than ten years of service shall be made in accordance with the *Code of Virginia* §51.1-1206.

As of June 30, 2004, there were 1,001 accounts in the fund. The fund balance in FY 2004 was $574,448, with an average of $574 per account in the fund. However, the fund does not appear to be well utilized. During a study of Emergency Medical Services conducted by JLARC, staff found that the 1,001 accounts represent less than 3 percent of Emergency Medical Service Providers. Further, the fund was not mentioned as an effective tool for recruitment or retention during interviews and focus groups with JLARC staff conducted for the study. Through June 30, 2004, $2,919 has been paid out to beneficiaries. The administrative expenses associated with the fund, since the inception of the fund in 2001 through June 30, 2004, were $312,389. The administrative expenses were highest in the first two years of the fund, or FY 2001 and FY 2002. The costs in these two years were $119,527 and $89,453 respectively. While administrative costs have continued to decline each subsequent year, the cost per account for FY 2004 was $39.82. From inception through FY 2005, approximately $428,000 in general funds have been appropriated to pay the costs associated with administering the fund (such as legal fees, actuarial consulting services, banking services, and record keeping) but, as stated above, no general funds have been contributed to the fund itself.

Virginia Sickness and Disability Program Expanded in the Fall of 2002. The 1996 General Assembly requested the Workforce Commission to develop a plan for providing short- and long-term disability coverage to State employees. Concurrently, VRS established an employee process improvement team to examine the disability retirement program. As a result of these and other legislative efforts, the Virginia Sickness and Disability Program (VSDP) was passed by the General Assembly and first introduced to State employees in 1999. The objective of the program is to provide eligible employees supplemental or replacement income during periods of partial or total disability. The program encourages rehabilitation. The VSDP's ultimate goal is to return the employee to gainful employment when he or she is medically able. In contrast, an employee may apply for disability retirement under VRS if he or she becomes unable to perform his or her job because of a physical or mental disability and the disability is likely to be permanent. State employees enrolled in the VSDP are not eligible for the VRS disability retirement program.

During the initial open enrollment period in 1999, 30,091 State employees enrolled in the program. In 2002, a second open enrollment period was offered to State employees. At that time, an additional 15,717 State employees enrolled in VSDP. State employees hired or rehired on or after January 1, 1999 are automatically enrolled in the program. Eligible employees who did not opt out of the VSDP during the open enrollment period that began October 1, 2002 and ended on November 30, 2002, are now enrolled in VSDP. Members of the Judicial Retirement System and employees of political subdivisions, including public school divisions, are not eligible for VSDP. The program also does not cover part-time and adjunct faculty. The program does not cover teaching, research and administrative faculty of Virginia colleges and universities who participate in the Optional Retirement Plan (ORP). Several other types of employees are excluded from participation. In general, these other employees are covered under an alternative retirement plan or flexible benefit plan offered by their agency.

As of October 31, 2004, approximately 24 percent or 20,925, of eligible employees remain in the previous sick leave program. Employees remaining in the previous sick leave program are eligible to apply for disability retirement under VRS. Prior to the implementation of the VSDP, an average of 566 employees retired each year under VRS' disability retirement program. After VSDP, the average number of annual disability retirements reduced to 334 per year or a 41 percent decline in disability retirements. However, the number of employees on long-term disability (LTD) under VSDP has been growing since the inception of the program in 1999. In addition, the VSDP appears to have experienced some adverse selection during the last open enrollment period, because the number of employees on long-term disability sharply increased from 688 in June 30, 2003 to 1,355 in June 30, 2004.

Unlike traditional disability retirement, the VSDP long-term disability program has a strong return-to-work component, including vocational rehabilitation. In addition, once employees on LTD reach age 65, they must retire for service. Further, the LTD benefit is off-set by other earned income and by any social security disability benefits received.

The VSDP also has a sick leave and family and personal leave component. Under the previous sick leave system, employees earned 10 hours of sick leave per month. In addition, under the prior sick leave system, employees could carry over their sick leave balances from year to year. Upon termination of employment, employees were then eligible to receive 25 percent of their sick leave balances up to $5,000. Under VSDP, sick leave, and family and personal leave balances expire annually. Terminating employees under VSDP are not paid for any sick or personal leave balances.

The VSDP's third party administrator (TPA), UNUM Provident, conducted a pilot study in 2003 at the Virginia Department of Transportation (VDOT) and found that lost hours had declined under the VSDP compared to the previous sick leave program. While this study represents experience at one agency, VDOT is one of the Commonwealth's largest agencies with a diverse employee population, which performs a wide range of functions. While VSDP has not been in place for an extended period of time and the program recently had an influx of new enrollees, VRS along with its TPA should continue to thoroughly analyze the program, particularly the long-term disability portion of the program and how it compares to the previous VRS disability program. Further, VRS, with the assistance of the Department of Human Resource Management and the Department of Accounts, should review and compare lost hours under VSDP compared to the previous sick leave system.

Long-Term Care Insurance Added to the VSDP Program. The 2001 Session of the General Assembly provided funds for the VRS to implement an employer-paid Long-Term Care insurance program for State employees participating in the VSDP. This employer-funded long-term care benefit is administered by Aetna Life Insurance Company. The new benefit became effective March 1, 2002. As of June 30, 2004, 62,941 employees were enrolled in the program. The cost per employee for this program is $112.70 per year. To date, only seven claims for benefits, in the total amount of $12,191, have been paid. The total premiums collected for this program from its inception in March of 2002 through June 30, 2004, were $14.8 million.

Purchase of Prior Service Has Been Popular with Employees. Legislation passed by the 2001 General Assembly, streamlined the purchase or service process, thereby making it easier to understand the cost of purchasing service and promoting the purchase of service early in employees' careers, when it is less costly to the retirement system. Prior service is a period of service that has not been credited to a members' VRS service record, because it was not covered by VRS, or it was covered service for which the member previously took a refund. A member may purchase service credit at five percent of creditable compensation if the member purchases the service within three years of employment in a VRS-covered position or within three years of becoming eligible. After three years, the cost of purchase will be at a higher actuarial equivalent cost. If a member was employed in a VRS-covered position as of July 1, 2001 and eligible to purchase service at that time, in order to purchase service at the more favorable five percent rate, the member had to buy or be under a contract to purchase the service by June 30, 2004. After June 30, 2004, the employee would have to purchase the service at the actuarial equivalent rate, usually much higher. From FY 2001 through October 2004, VRS processed more than 65,000 applications for purchase of service. During this time, 47,839 employees have purchased approximately 1.2 million months of service or an average of approximately 24 months of service each. Under provisions of the Workforce Transition Act, eligible State employees involuntarily terminated can use severance benefits to purchase VRS service credit.

To address the increased workload associated with the purchase of service program, VRS had to realign existing resources. VRS also had to implement a communications campaign to inform benefits administrators, current employees, as well as new employees on the new rules associated with the purchase of service program. For example, VRS hosted training sessions for benefits administrators, posted information on its web site, updated member handbooks to include information on the purchase of service provisions, and developed articles for its newsletter. By the level of participation, it appears that VRS was effective in its effort to spread the word about the new terms and conditions relating to purchase of service.

Deferred Compensation Plan Participants Increase. The Commonwealth's Deferred Compensation Plan (DCP) was created in July 1980 under the authority granted by section 457 of the U.S. Internal Revenue Code, and is often referred to as a 457 plan. Initially, the Plan was administered by the Department of Personnel and Training (now the Department of Human Resource Management). VRS took over responsibility for the Plan in July 1984.

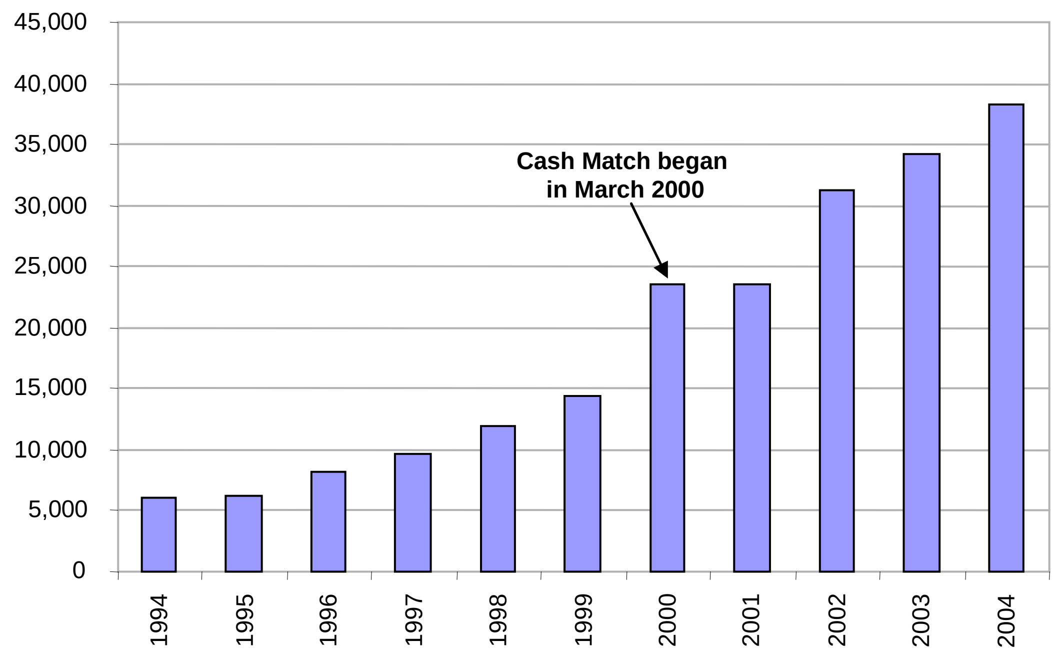
As shown in Figure 4, in 1994 there were 6,033 participants in the Plan. As of June 30, 2004, there were 38,296 participants with account balances. Largely as a result of the implementation of the Cash Match Plan in March 2000, the popularity of the DCP has increased. In addition, the passage of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) allowed for increased contribution limits, removed certain limitations to investing in both 403(b) and 457 plans, and allowed for the use of 457 funds for the purchase of service in a defined benefit plan.

Wage employees became eligible to participate in the Plan on July 1, 2002, but they are not eligible for the cash match. However, wage employees generally work on a temporary basis and are therefore generally unlikely to contribute to the Plan. For example, VRS estimates that about .01 percent of eligible wage employees contribute to the 457 Plan. Approximately 93 percent of participants receive the cash match. The removal of the waiting period for the cash match in 2002 served to boost this percentage.

At June 30, 2004, VRS estimates that there were 129,486 employees eligible to participate in the DCP (98,986 salaried and 30,500 wage). For that pay period, VRS estimates

Figure 4

Deferred Compensation Participants, FY 1994 – FY 2004



* Note: Fiscal Year 2001 includes only active contribution participants.

22 percent of eligible employees contributed to the Plan. However, college and university employees on less than a 12-month contract are not reported for the June 30 payroll. In addition, wage employees who work on a temporary basis and who are not eligible for the cash match generally do not participate in the Plan. If only salaried State employees are considered, other than those employed by colleges and universities, VRS estimates that approximately 42 percent contributed to the Deferred Compensation Plan.

In 1993, a consultant hired by JLARC, found that the DCP's participation rate was significantly lower than the national average for state-sponsored deferred compensation programs. The consultant recommended that a realistic goal for the program would be 25 to 30 percent of eligible participants. The consultant further recommended that this goal should exclude those State employees who are also eligible to participate in 403(b) plans sponsored by institutions of higher education. Due to the implementation of EGGTRA since this recommendation, many of the barriers to participating in both a 457 and 403(b) have been eliminated. Depending on how the participation rate is calculated, VRS appears to have met or exceeded the participation goal set forth by the JLARC consultant. Nevertheless, many of those participants who have elected the 403(b) plan still do not participate in the 457 along with the 403(b).

Not surprisingly, as income rises, the rate of participation in the deferred compensation program also increases. Among salaried State employees, VRS estimates that 32 percent of employees earning less than $35,000 participated in deferred compensation. For those employees earning more than $35,000 and less than $50,000, the participation rate increases to 49 percent. Employees earning more than $50,000 but less than $100,000, have a participation rate of 54 percent, while 60 percent of employees earning more than $100,000 participate in the Plan. Despite program enhancements and communications efforts by VRS, participation varies significantly across agencies and secretariats from approximately 60 percent in Commerce and Trade secretariat agencies to 40 percent in the public safety secretariat agencies.

In 1999, the *Code of Virginia* established the employer match at the lesser of $50 per pay period or 50 percent of the amount contributed by the employee. However, the Appropriation Act caps the employer match at a maximum of $20 per pay period. Salaried State employees contributing at least $10 per pay period are eligible for the tax-deferred cash match. Currently, salaried State employees receive a cash match of either 50 percent of the contribution or $20 per pay period, whichever is less. Qualified employees of political subdivisions and school districts may receive a cash match in an amount determined by their governing bodies. In other words, in order to get the maximum cash match, employees have to contribute $40 per pay period. If an employee, for example, contributes $30 per pay period, the employee will receive a cash match of $15.

In addition to the cash match, a Fourth Tier option, the Self-Directed Brokerage (SDB) option was added in 2001. The Fourth Tier allows deferred compensation participants to direct their deferred compensation plan assets to participating retail mutual funds. The self-directed brokerage account is for knowledgeable investors who acknowledge and understand the risks associated with the mutual fund investments contained in the "SDB" Account. In general, investment fees are higher in the SDB account. Likely as a result of higher fees and the requirement for sophisticated investment experience, currently only 51 participants have funds in the SDB option.

Technology Plays a Major Role in Service Delivery at VRS

Over the past ten years, technology has changed a great deal. During the last decade, VRS has been working to cultivate a culture of change where technology is accepted by staff and where manual systems and processes are automated wherever possible. In order to harness the benefits of technology, VRS has had to invest in retooling its workforce, as well as purchasing required hardware, software, and other systems. VRS began its automation effort in 1995 with the implementation of an imaging system. Today, VRS includes among its agency performance outcomes increasing web access, enhancing service in the customer contact center, and improving employer reporting and payment processes. With the increased access to information, proper security and internal controls are essential.

Since 1995, VRS has used an imaging system for managing its form records. The imaging system originally outsourced to and developed by Syscom, is now operated and maintained by VRS staff. By bringing the system in house, VRS has improved the functionality and performance of the system. For example, the old imaging system has been replaced by a new system architecture that permits the separation of test, development, and production activities.

For a number of years, VRS has been in the process of planning for and developing a knowledge management system. The knowledge management system will not only organize documents and information, it will aid in capturing the tacit knowledge of VRS employees. The procurement for the knowledge management system was completed in June 2004. Production implementation began in October 2004. The system will allow for continued expansion and increased sophistication. Currently, approximately 900 documents reside on the knowledge management system.

Through the use of technology, VRS has been able to move forward with its agency performance outcome of self-service. The move toward self-service has been assisted by web technology. For example, the VRS web site now provides the following secure self-service applications and tools for employers: benefit estimate generation; certification of purchase of prior service eligibility; status of service purchase; request for account balance letters; access to VRS forms and publications; and ability to check employee service/salary histories. Previously, benefits administrators had to perform manual estimates for their members. With the benefit estimate generator, the web-enabled feature can tap into the member's actual service record to help ensure the accuracy of the estimate. Similarly, benefits administrators can now view an employee's complete service record on the web, including salary, employer, and purchase of service histories.

In order to achieve greater transparency with members and the public, VRS should consider posting Board and IAC meeting minutes on the web site. In addition, a search feature on the web site would also be useful. Members also have access to a number of tools and other useful information on the web site, but members do not have access to information that is housed in VRS legacy systems. VRS does plan to increase the number of self-service offerings on its web site for members. However, VRS first has to develop procedures which will permit members access to VRS service data and other information, but will also maintain the integrity and security of the data.

VRS has a number of other technology projects underway. These include: enhanced telephony implementation of an MCI Webcenter telephony solution; replacement of the existing general ledger system; increased identity theft protection, such as the removal or encryption of social security numbers; enhanced mainframe and PIN security procedures to facilitate increased self-service for members via the web; expansion of the Internet payroll reporting tool for employers; and facilitate the automated exchange of health care credit information between VRS and the Department of Human Resource Management.

Over the past five years, VRS has mainly focused on interoperability and security. With respect to interoperability, for example, VRS has made strides in connecting its legacy systems to the web. While the advent of the web has afforded unprecedented access to information, the challenge of securing data and information at VRS has become even greater. For example, the agency must provide intrusion detection, SPAM/Virus protection, identity theft protection, PIN security, etc. To address these concerns, the agency has developed a security team and a strong security awareness program. In addition, working with and through Virginia Information Techologies Agency (VITA), the agency has developed business continuity and disaster recovery plans for its mission critical systems (the GL and RIMS systems). As new technologies become available, ensuring proper security as well as internal and external controls must continue to be a priority for the agency.

Review of VRS' Actuarial Valuations and Benefit Funding

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

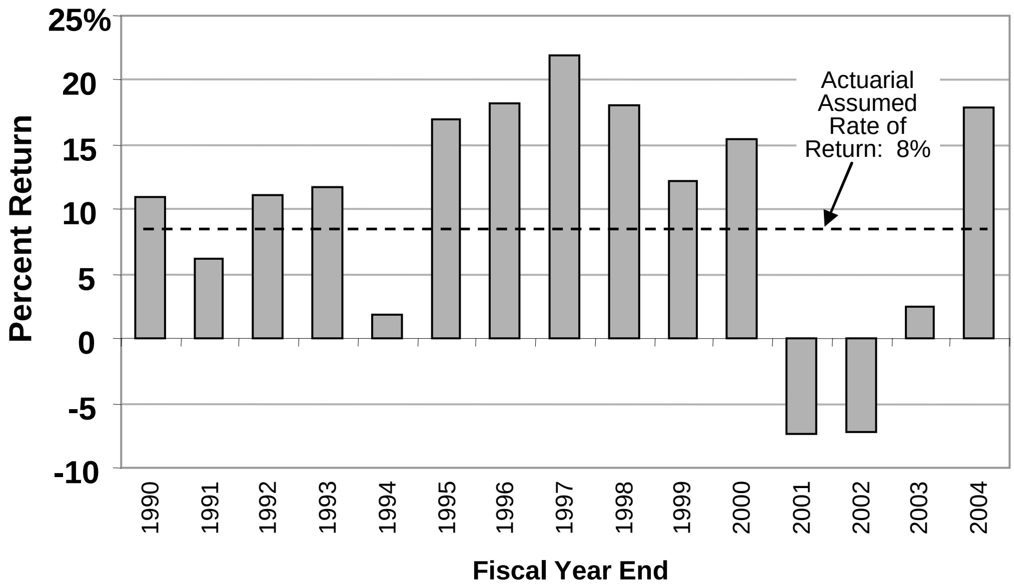
VRS funding levels, as measured using a number of different indicators, have generally improved since 1994. This improvement was due in large part to the positive influence of investment income. In 2002, the funded levels began to deteriorate somewhat, primarily as a result of the market losses between 2001 and 2003. In spite of these changes, the overall VRS funding level is reasonably sound. However, the funding level of the Judicial Retirement System (JRS) has historically been lower than VRS by comparison. This is also true for the Virginia Law Officers' Retirement System (VaLORS) which was established on October 1, 1999 and for the State Police Officers' Retirement System (SPORS).

In general, one of the more useful measures to focus on concerning pension plan funding is not whether a plan is currently fully funded (100 percent), but whether the plan is on a schedule that is reasonably intended to reach that goal. Results of the actuarial valuations indicate that VRS is making improvements in all plans.

Board Certified Rates Continue to Address Systems' Funding Status. The member contribution rate of five percent is established by statute. In contrast, the employer contribution rates are calculated by the VRS actuary. In determining the costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an investment return assumption. Since the last valuation, no major changes have been made to the assumptions. The most significant assumptions are (1) the assumed rate of investment return, currently set at 8 percent, (2) the assumption regarding future salary increases, which is currently based on a table that varies by service, and (3) the assumption regarding future increases in the automatic cost-of-living adjustment (COLA), currently set at 3 percent. In addition to the actuarial assumptions, the actuary also allocates costs to particular years. VRS uses the entry age normal method. The actuary also develops the value of actuarial assets. Finally, the valuation is based on an amortization method and period. Figure 5 shows that

Figure 5

VRS Annual Performance, FY 1994 – FY 2004



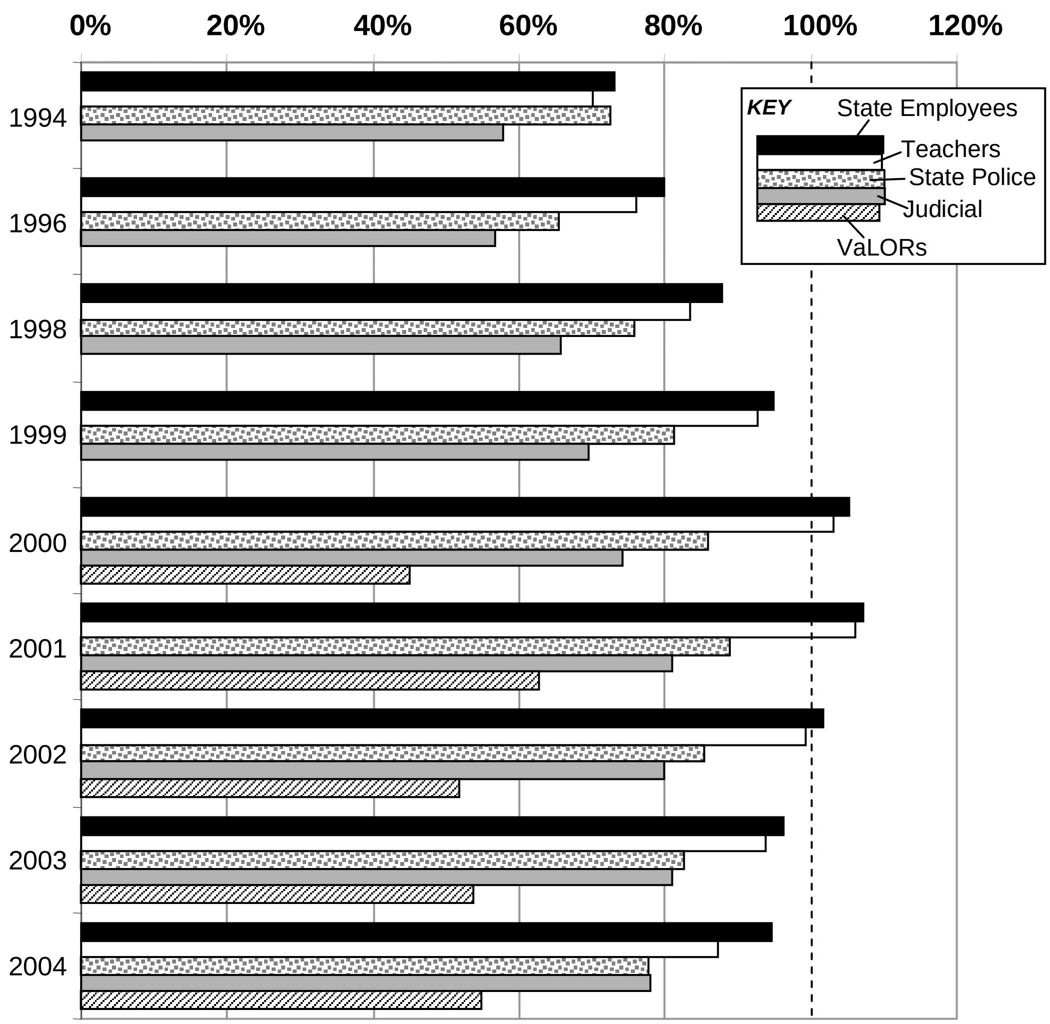
in 1991, 1994, and from 2001 through 2003, the fund did not achieve the 8 percent assumed actuarial rate of return.

The funded ratio for State employees, teachers, State Police, and judges declined slightly from the 2003 valuation (Figure 6). However, the VaLORS system experienced a small improvement in its funded ratio. Declines in the funded status from the previous year for the four systems have been taking place since 2002 valuation. The decline is largely due to asset losses on the actuarial value of assets.

As of June 30, 2004, the fund is nearly back to where it was before the markets suffered a precipitous decline beginning in 2001. According to the VRS actuary, the investment rate of return generally is the most important factor affecting contribution rates. Despite strong investment returns in 2004, the funded ratio will not immediately improve. This is because of the five-year smoothing technique employed by the actuary. Due to the use of this smoothing technique, the recognition of prior deferred losses caused significant losses on the actuarial value of assets in the June 30, 2004 valuation. In any given year, only 20 percent of the excess gain or loss is recognized. For example, despite an excellent return in FY 2004 (17.7 percent on market value basis), only 20 percent of the gain over 8 percent was recognized in the 2004 valuation. The State employee, the teacher, and the State Police systems all had significant liability losses in addition to the actuarial asset losses. For example, one of the largest sources of liability loss was the large number of service purchases. As noted previously, the five percent cost to purchase service is generally less than an actuarially calculated rate. However, the VRS had anticipated that a large number of members would take advantage of the opportunity to purchase service at five percent. The Judicial Retirement System (JRS) had a small liability loss. Due to

Figure 6

Funded Ratios for VRS' Five Major Systems, FY 1994 – FY 2004



higher turnover than expected, VaLORS experienced liability gains which partially offset the actuarial asset losses.

In recognition of the funded status of SPORS, JRS, and VaLORS, the Board of Trustees has developed a policy setting the employer contribution rate at 25 percent of payroll for SPORS and VaLORS and at 45 percent of payroll for JRS. The Board mandated that these rates be effective until these systems have funded ratios (the ratio of the actuarial value of assets to the actuarial accrued liability) of 90 percent or more. As shown in Figure 6, none of these three funds had achieved a 90 percent funded ratio as of the June 30, 2004 valuation date.

Table 3 summarizes the actuarially calculated employer contribution rates from the last four valuation studies. In contrast, Table 4 summarizes the employer contribution rates

Table 3

Summary of Actuarially Calculated Employer Contribution Rates
(Excluding Health Care Credit)

	2004 Valuation (Informational Purposes Only)	2003 Valuation Rates for FY 05 – FY 06	2002 Valuation (Informational Purposes Only)	2001 Valuation Rates for FY 03 – FY 04
State Employees	5.95%*	3.89%*	3.04%*	3.60%**
Teachers	10.27%*	8.10%*	6.55%*	3.60%**
State Police Officers (SPORS)***	21.41%	17.8%	15.86%	12.11%
State Judges (JRS)****	35.38%	31.84%	32.01%	30.61%
Virginia Law Officers (VaLORS)***	18.85%	18.30%	17.81%	13.22%

*Pooled contribution rate is 8.71% in 2004, was 6.77% in 2003, and 5.23% for 2002.
**Reflects a pooled or blended rate for State employees and teachers.
*** Board specified rate was 25% of payroll until 90% funded.
****Board specified rate was 45% of payroll until 90% funded
Note: The off-year valuations (2002 & 2004) are for not used for rate setting purposes. However, the valuations provide an indication of the direction where the rates may be heading in the future.
Source: JLARC staff analysis of VRS actuary's valuation.

Table 4

Summary of Funded Contribution Rates
(Excluding Health Care Credit)

	FY 2005	FY 2004	FY 2003
State Employees	3.91%	3.77%	0.00%
Teachers	6.03%	3.77%	3.77%
State Police Officers (SPORS)*	16.49%	12.79%	11.05%
State Judges (JRS)**	30.55%	32.03%	29.00%
Virginia Law Officers (VaLORS)*	16.99%	13.95%	12.00%

*Board specified rate was 25% of payroll until 90% funded.
**Board specified rate was 45% of payroll until 90% funded
Source: JLARC staff analysis of VRS documents.

actually funded by the Commonwealth. The actuary now calculates both a pooled rate for State employees and teachers as well as a separate rate for each group.

VRS Remains Well-Funded. Actuaries generally consider a system to be well-funded when assets cover more than 70 percent of liabilities. According to the schedule of funding progress in the 2004 valuation, VRS assets covered more than 70 percent of liabilities in all systems except VaLORS. However, VaLORS is a new system, which only began in 1999. It is not uncommon for a system that age to have a lower funded ratio. According to the VRS actuary during a presentation of the 2004 valuation to the VRS Board of Trustees, the system has made significant funding progress over the last nine years.

One of the key features of the VRS pension benefit is the cost-of-living-allowance (COLA). The COLA provides a degree of protection from the effects of inflation. Previously, the COLA was funded on a pay-as-you-go basis, rather than in advance as in the case of the pension benefit itself. The VRS actuary noted that the push to prefund the COLA and recent investment gains have put the fund in a good position. The cost of the COLA is being pre-funded in the actuarially calculated rate or the actuarial rate includes the cost of pre-funding the COLA.

Further, the VRS actuary noted that during the boom years of the late nineties, many pension systems enacted higher multipliers or other enhanced benefits for their members. In general, the General Assembly acted judiciously by resisting the temptation to greatly increase benefits. Had enhanced benefits been enacted, rates would certainly be higher and the unfunded liability greater. On the other hand, the VRS actuary also noted that not receiving the actuarially determined rate from the State (see Table 5), particularly for the teacher group, would add to upward pressure on the calculated rates for the 2005 valuation.

Examining the ratio of active members to retired members over time at VRS shows a decline in the number active members compared to retired members. In 1984, for example, there were 5.04 active members for every retiree. In 1994, there were 3.59 actives for every retiree. Finally, in 2004, there were 2.79 active employees for every retiree. This ratio provides insight into the amount of contributions needed from actives and demonstrates that the population is aging and/or retiring. Essentially, in a mature retirement system, one would expect this trend and this ratio is the reason why benefits are pre-funded.

Return assumptions developed by the VRS staff for the 2004 asset allocation review indicate lower expectations in the near term relative to the returns generated in the 1990s. This study also resulted in return expectations that may be lower than the 8 percent investment return assumption used by the actuary in the asset liability model. This discrepancy is mainly due to the difference in the time horizon for these two analyses. Asset allocation assumptions are developed by the staff annually, on a forward looking basis for the next ten years whereas, the VRS actuary utilizes very long term assumptions based on historical market returns for the asset/liability study. Nevertheless, these potential lower returns, coupled with the impact of the market conditions VRS experienced from 2000 through 2003 would continue to contribute to a lower funded status and increasing contribution rates in the near future. The VRS Board analyzed the feasibility of raising the risk of the investment fund in order to attempt to increase returns going forward, but determined that it would be more prudent to remain at the current risk level and would rather seek to lower its downside risk by investing in other strategies that represent good diversification benefits and reasonable relative rates of return.

In light of the varying opinions concerning return and inflation expectations going forward, prior to the June 30, 2005 valuation, the Board along with the IAC plans to carefully consider all of the assumptions that will be employed by the actuary for the 2005 valuation. The assumptions include the investment return rate, COLA increase, mortality rates, retirement rates, termination rates, disability rates, percent electing a deferred termination benefit, asset valuation method, salary increase rates, actuarial cost method, payroll growth rate, funding period, and disability election.

Premium Holidays Will Cause Group Life Insurance Rates to Increase. The VRS group life insurance benefit is funded through a mechanism consisting of required contributions from participating employers, plus investment returns on those contributions. The annual premium for insuring the lives of active employees is determined by Minnesota Life and is based on the program's claims experience of the prior year. The annual premium for insuring the lives of retirees is determined based on a periodic actuarial valuation by VRS. Therefore, the retiree life insurance benefit is intended to be funded in advance, using a level percentage of payroll, over an employee's years of service. The net assets available for benefits as of June 30, 2004, were $778,464,000.

During the early 1990's, the actuarially-determined contribution rate for the group life insurance program decreased several times. These decreases were due to the program's favorable mortality and investment experience. However, the contribution rate recommended by the actuary has recently increased. This increase, is largely due to the suspension of premiums for fiscal years 1994, 1997, 1999, 2000, part of 2002, 2003, 2004 and 2005. In addition, the premium holidays will result in increases in future group life insurance rates.

JLARC Will Continue to Assess Actuarial Soundness. Section 30-81 of the *Code of Virginia* directs JLARC with the assistance of an actuary, to conduct an actuarial review of the Virginia Retirement System (VRS) once every four years. The last actuarial audit was completed in July 2001, and was based on the June 30, 2000 actuarial valuation of the VRS, performed by Watson Wyatt, consulting actuary to VRS (now Gabriel Roeder Smith). The primary purpose of the audit was to perform an independent verification and analysis of the assumptions, procedures, and methods used by Watson Wyatt in preparing the valuation. At the time, the JLARC actuary, Mercer Human Resource Consulting, found Watson Wyatt’s work to be reasonable and performed according to generally accepted actuarial standards and principles and that the work was performed by fully qualified actuaries. A copy of the 2000 audit can be found on JLARC’s web site.

The next quadrennial review is scheduled to be performed based on the June 30, 2004 actuarial valuation of the Virginia Retirement System which was performed by Gabriel Roeder Smith. The 2004 valuation, like the 2000 valuation, was based upon the 2000 experience study completed by Watson Wyatt. As the 2004 valuation of the VRS was conducted by the same actuary and is based on the same experience study, as well as generally the same assumptions, another actuarial audit or review would likely result in a report containing an analysis similar to that which was provided in July 2001. In addition, VRS has recently contracted with a new actuary. This new actuary, Palmer and Cay, will be conducting both a new experience study and valuation for the period ending June 30, 2005. As a result, it would be more instructive to conduct the quadrennial audit based upon the June 30, 2005 valuation. As in the previous reviews, JLARC's actuarial audit in 2005 will consider the assumptions, procedures, and methods used by the actuary and should be completed in early 2006.

Leadership Change at VRS

On December 2, 2004, VRS Director W. Forrest Matthews, Jr. announced that he will retire, effective April 1, 2005. Mr. Matthews has served as Director of the retirement system since March 2002. Prior to joining VRS, he served as the Director of Finance for the County of Henrico, Virginia. While with Henrico County, he was a member of the VRS Board of Trustees and, beginning in March 2001, served as its Chairman. The VRS Board of Trustees will immediately conduct a search for a new director.

***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.**

JLARC Staff Assigned to VRS Oversight:
Glen S. Tittermary, Deputy Director
Patricia S. Bishop, Principal Legislative Analyst
John W. Long, Editor

Appendix

Status of 1994 JLARC Recommendation Concerning VRS

Recommendation	Status	Notes
Amend section 5.1-1109 of the *Code of Virginia* to require the General Assembly to appoint some members of the Virginia Retirement System Board of Trustees.	✓	
The General Assembly may wish to require that a majority of Virginia Retirement System trustees have experience in the direct investment of large funds. Representation for teachers, State classified employees, and local employees should be continued.	✓	
The General Assembly may wish to amend Section 51.1-109 of the *Code of Virginia* to prohibit elected officials and executive branch appointed officials from serving on the Virginia Retirement System Board of Trustees. However, the State Treasurer could be appointed as an ex-officio, non-voting member.	✓	Appointment of the State Treasurer as an ex-officio, non-voting member of the Board was not implemented.
The General Assembly may wish to amend the *Code of Virginia* to define the role and responsibilities of the chair of the Virginia Retirement System Board of Trustees.	✓	
The General Assembly may wish to amend the *Code of Virginia* to establish the position of chief investment officer for the Virginia Retirement System. The duties of the chief investment officer should include coordination of asset allocation; communication with trustees, advisory committees, and the General Assembly; and staff support for the VRS Board of Trustees and its advisory committees.	✓	
The General Assembly may wish to provide for the employment of the chief investment officer by special employment contract which would set out performance and formal reporting requirements. The General Assembly may also wish to require that the appointee to the position be confirmed by the General Assembly. The employment contract should require the chief investment officer to make periodic reports to the General Assembly.	✓	CIO is employed under a special contract with the Board, reports directly to the Board, and serves at the pleasure of the Board.
The General Assembly may wish to amend the *Code of Virginia* to require the Virginia Retirement System Board of Trustees to formally maintain an Investment Advisory Committee and a Real Estate Advisory Committee. The Code of Virginia should define the general responsibilities of the advisory committees.	✓	Under §51.1-124.26, to assist the Board in fulfilling its fiduciary duty, the Board shall appoint an Investment Advisory Committee (IAC) or any other such advisory committees as it deems necessary. Currently, real estate matters are discussed and reviewed by the IAC.
The General Assembly may wish to define in the statute qualifications necessary for membership on the Investment Advisory Committee and the Real Estate Advisory Committee. In addition, the General Assembly may wish to require that a majority of the members of each advisory committee meet such standards.	✓	
The General Assembly may wish to consider amending Article X, Section 11 of the *Virginia Constitution* to include the following provisions: the VRS retirement funds are independent public trusts, the assets of which are not subject to appropriation by the General Assembly or for	✓	*(Table continues)*

use as loans for other State purposes; and the financing of VRS pension benefits shall be based on sound actuarial principles, with employer contributions consistent with the recommendation of the VRS actuary.		
The General Assembly may wish to establish a permanent Virginia Retirement System Study Commission to provide ongoing oversight and evaluation of the retirement system. The Commission should be composed of three members from the Senate of Virginia, three members from the House of Delegates, and three qualified professionals appointed by the Governor. To carry out its duties, the commission should have a permanent staff and the authority to hire consultants. Funding for the commission should be from the retirement system trust funds to ensure continuity and independence.	✓	Under the Virginia Retirement System Oversight Act §30-78, JLARC provides this function.
To ensure an effective system of oversight, the General Assembly may wish to establish the following responsibilities for the VRS Study Commission: receive quarterly and annual reports from the Virginia Retirement System on actuarial soundness and investment performance; review and report as necessary on all proposed legislation affecting VRS' structure, investments, or funding prior to the consideration by the standing committees of the General Assembly; prepare and maintain background and other information for use by members of the General Assembly; make an annual report to the General Assembly and the Governor on the status of the retirement system; and conduct special or continuing studies as directed by the General Assembly.	✓	
The General Assembly may wish to consider amending the *Code of Virginia* by adopting a prudent person standard without a legal list, comparable to the standard set forth in the Employee Retirement Income Security Act.	✓	
The VRS Board of Trustees should adopt a written investment policy statement drawing from the Five Year Plan, the Policies and Procedures Manual, and other appropriate sources.	✓	
Once this policy is adopted, the VRS Board of Trustees should re-evaluate the investment policy statement at least annually and either reaffirm or amend it as appropriate. Periodically re-evaluating the investment policy statement has the added benefit of compelling the Board, IAC and staff to continually reassess the VRS' investment objectives and the basis for those objectives.	✓	
The VRS Board of Trustees and the IAC should review the asset allocation policy as a formal agenda item for detailed discussion at some point each year in a setting other than the annual retreat.	✓	
VRS should develop procedures to reduce duplication in the hiring and continued retention of managers, enhance the selection criteria for its money managers by adding liability insurance, increase the staff responsible for its domestic equity program, and improve its policies for determining the time period over which a manager must meet required investment objectives.	✓	
VRS staff should review the nature and specificity of the new guidelines recently imposed on commodity trading advisors or CTAs to assure that the staff is satisfied with them.	**N/A**	As of December 1994, VRS no longer had a managed futures program.
VRS should restructure its fee arrangement with RP Consulting, to base it only in minor part, if at all, on turnover. Instead, the fee should be based on the amount of equity in the program or a flat fee.	**N/A**	As of December 1994, VRS no longer had a managed futures program.
VRS should negotiate a lower fee for its futures contract. If a lower fee cannot be established, VRS should re-bid the contract. *(Table continues)*	**N/A**	As of December 1994, VRS no longer had a managed futures program.

The Virginia Retirement System Board of Trustees should establish a funding target, ensure that its actuarial assumptions and methods are appropriate to achieve the target, and then monitor progress toward the target.	✓	
The Virginia Retirement System Board of Trustees should examine the long-term trends in funding status through the use of open group projections. At the same time, the VRS Board should examine the sensitivity of these projections to the assumptions of future experience.	✓	As part of its asset allocation process, VRS also annually performs an asset liability analysis.
The General Assembly, and the Virginia Retirement System Board of Trustees, may wish to consider alternative methods of funding and providing cost of living adjustment benefits.	✓	The actuarial rate now includes the cost of pre-funding the COLA.
The Virginia Retirement System Board of Trustees should identify and consider available options for the funding and provision of pension benefits to ensure that short and long-term costs can be held to acceptable levels.	✓	
The Virginia Retirement System Board of Trustees should modify the actuarial valuation process as follows: • Recognize the timing lag in determining the employer contribution rate; • Reduce the amortization period for current unfunded accrued liability by two years each biennium; and Amortize all additional unfunded accrued liability, from plan amendments, actuarial gains and losses, and assumption or method changes, separately over a reasonable period, such as 15 years, from the inception of the additional unfunded liability.	✓	
The Virginia Retirement System Board of Trustees should analyze its economic actuarial assumptions.	✓	
The Virginia Retirement System Board of Trustees should implement the changes in demographic assumptions recommended by Buck Consultants in its 1992 experience investigation.	✓	
The Virginia Retirement System Board of Trustees should ensure that long-term implications of changes in actuarial assumptions are determined prior to implementation.	✓	
The Virginia Retirement System Board of Trustees should analyze the $41.3 million actuarial loss for State employees and the $156.5 million actuarial loss for teachers resulting from "other" causes to determine if any of the reasons for these losses are likely to recur.	✓	
The Auditor of Public Accounts, with the assistance of an independent actuary, should review the Virginia Retirement System's actuarial valuation, including its methodology and assumptions, every five years. The Auditor of Public Accounts should make recommendations to the General Assembly for improvements to the actuarial valuation's methodology and assumptions.	✓	JLARC hires an actuary to perform a quadrennial actuarial audit.

KEY: ✓ = Recommendation substantially implemented
N/A = Not Applicable

Source: JLARC staff analysis.

JLARC Reports on the Virginia Retirement System

The Virginia Retirement System's Investment in the RF& P Corporation, December 1993
Review of the Virginia Retirement System, January 1994
Review of the State's Group Life Insurance Program for Public Employees, January 1994
The VRS Investment Program, March 1995
The VRS Disability Retirement Program, March 1995
The 1991 Early Retirement Incentive Program, May 1995
Semi-Annual VRS Investment Report No. 4, September 1995
Semi-Annual VRS Investment Report No. 5, May 1996
Biennial Status Report on the Virginia Retirement System, May 1996
Legislator's Guide to the Virginia Retirement System, First Edition, May 1996
Review of VRS Fiduciary Responsibility and Liability, January 1997
Semi-Annual VRS Investment Report No. 8, May 1997
Semi-Annual VRS Investment Report No. 9, December 1997
Semi-Annual VRS Investment Report No. 10, July 1998
Semi-Annual VRS Investment Report No. 11, December 1998
Legislator's Guide to the Virginia Retirement System, Second Edition, May 1999
Semi-Annual VRS Investment Report No. 12, July 1999
VRS Biennial Status and Semi-Annual Investment Report No. 13, December 1999
Semi-Annual VRS Investment Report No. 14, July 2000
Semi-Annual VRS Investment Report No. 15, December 2000
Semi-Annual VRS Investment Report No. 16, July 2001
Semi-Annual VRS Investment Report No. 17, December 2001
VRS Biennial Status and Semi-Annual VRS Investment Report No. 18, July 2002
Semi-Annual VRS Investment Report No. 19, December 2002
Semi-Annual VRS Investment Report No. 20, July 2003
Semi-Annual VRS Investment Report No. 21, December 2003
Semi-Annual VRS Investment Report No. 22, July 2004
VRS Biennial Status and Semi-Annual Investment Report No. 23, December 2004
