Legislator's Guide to

The Virginia Retirement System

An Informational Handbook and Reference
Prepared by the VRS Oversight Staff of the
Joint Legislative Audit and Review Commission

First Edition – May 1996

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Preface to the First Edition of the *Legislator's Guide to the Virginia Retirement System*

Section 30-80E of the Virginia Retirement System Oversight Act requires the Joint Legislative Audit and Review Commission (JLARC) to prepare and maintain an informational guide to the Virginia Retirement System for the members of the General Assembly. In accordance with the mandate, JLARC has prepared this *Legislator's Guide to the Virginia Retirement System.* The *Legislator's Guide* addresses a long-standing legislative concern regarding the availability of information concerning the varied and interrelated aspects of VRS. The availability of such information is essential, given that the General Assembly is constitutionally required to maintain a retirement system for public employees.

The purpose of this document is to present, in a single volume, a broad range of information on the Virginia Retirement System. It is intended as a reference document for use by legislators, legislative staff, and others who need accurate information related to VRS governance and administration, benefit structure, investment policy, benefit funding policy, and recently enacted retirement legislation. Periodic updates will be made to the *Legislator's Guide* to ensure that information provided to the General Assembly is accurate and up-to-date.

This is the first edition of the *Legislator's Guide*, and incorporates the comments and suggestions from members of the Commission, legislative staff, and the Virginia Retirement System. We welcome any additional comments on the format, content, and usefulness of the material contained in the document.

On behalf of the Commission staff, I wish to acknowledge the support and cooperation of the Virginia Retirement System Board of Trustees and staff in the completion of this project. I also wish to acknowledge the assistance of the staff of the House Appropriations Committee, Senate Finance Committee, and the Department of Planning and Budget.

Philip A. Leone
Director

May 13, 1996

Topic Index to this Guide

A detailed contents page with a red and blue right margin is provided at the beginning of each substantive chapter

??? Responses to Frequently-Asked Questions Concerning VRS

How are VRS benefit levels established?

All VRS benefits are established and modified by the General Assembly through the legislative process.

➧ For related information, see pages II-1, II-39 to II-52

How are VRS benefits funded?

VRS benefits are funded by member contributions, employer contributions, and investment earnings. Member and employer contributions are invested by VRS in order to accumulate sufficient assets to pay for future pension benefits. In other words, tomorrow's pension benefits are paid for today. A member's pension benefit is guaranteed by his or her employer's continued participation in VRS, and by the employer's continued payment of the required employer contribution.

Each VRS member has an account consisting of member contributions plus interest credited at an annual rate of four percent. The member contribution, which most employers pay on behalf of their employees, is set by statute at five percent of compensation. All of the individual member accounts together comprise the VRS member reserves.

Member contributions, including employer-paid member contributions, are refundable to a member who terminates employment prior to retirement.

Each employer has an account which accumulates employer contributions, transfers of investment income, and amounts transferred from individual member accounts upon a member's retirement. Employer accounts are charged with benefit payments. All of the individual employer accounts together comprise the VRS employer reserve.

The employer contribution rate typically changes every two years based on an actuarial valuation that considers projected pension benefits, active employee withdrawal rates, retirement rates, life expectancies, future salary increases, inflation projections, and future investment earnings. There are separate employer contribution rates for State employees, teachers, State police, and judges. In addition, each political subdivision has its own employer contribution rate. Employer contributions are not refunded to members.

➧ For related information, see pages III-1 to III-5

How are VRS funds invested?

VRS funds are invested in three types of assets: equity (primarily stocks), fixed income (bonds) and real estate. The VRS board of trustees is responsible for ensuring that VRS funds are invested in a prudent and diversified manner. According to policy established by the VRS board of trustees, 70 percent of VRS funds are to be invested in equity assets, 21 percent in fixed income, and nine percent in real estate.

The VRS board of trustees is assisted by two professional investment advisory committees, one for equity and fixed income and the other for real estate. The VRS investment department, led by the Chief Investment Officer, manages and oversees the investment of funds on a day-to-day basis. Most VRS investments are managed externally by investment firms hired by VRS, although some are managed internally by VRS staff.

➧ For related information, see page IV-1

Are VRS pension benefits adequately funded?

Overall, the level of VRS pension benefit funding is reasonbly sound. VRS has sufficient assets to cover 77 percent of the projected future benefits of all its current members. In addition, VRS has accumulated sufficient assets to cover 100 percent of the future pension benefits of current retirees. The funding level for current active members is not as high.

The funding level for active judges is particularly low. As of June 30, 1994, VRS had not accumulated any assets to cover the future pension benefits for active judges. This low level of funding is due to increased liability from prefunding the COLA.

The cost of living adjustment, which helps protect the pension benefit from the effect of inflation, has historically been funded differently from the pension benefit itself. Using a pay-as-you-go approach, today's cost-of-living-adjustments are paid for today and tomorrow's are paid for tomorrow. Legislation enacted by the 1996 General Assembly requires that full prefunding of the COLA be phased in over a five-year period, beginning in fiscal year 1998.

➧ For related information, see pages III-2 to III-3, III-6 to III-20

What is the relationship between the amount of money in an employee's member account and the amount of the VRS benefit?

The two are not related, with one exception. VRS provides a defined benefit which is equal to the benefit multiplier X years of service X average final compensation plus an additional three percent. The additional three percent is optional for political subdivisions and local school boards. Provided that an individual is eligible to retire, a pension benefit equal to this amount is paid regardless of the amount in the member's account. Member contributions are used to help fund the defined benefit, but the contributions themselves do not make up the benefit.

The exception applies to an individual retiring under the recently enacted 50/10 early retirement provision. In this situation, a retiree receives a benefit equal to the greater of the benefit formula calculation using actuarial reduction factors, or the actuarial present value of his accumulated contributions plus interest.

The defined benefit approach to providing retirement benefits differs from a defined contribution benefit plan, under which a member's benefit is directly tied to the amount of his contributions. Under a defined contribution retirement plan, which is increasingly common in the private sector, accumulated contributions plus investment earnings are paid to the individual at retirement. That is the extent of the retirement benefit.

➧ For related information, see pages II-4 to II-7

Can an employee borrow against his or her VRS account balance?

No, this is not authorized by the *Code of Virginia*.

How long does it take to for a member to receive a refund?

A member leaving the retirement system should receive a refund within 45 to 60 days of submitting a refund request.

Why does VRS only pay four percent interest on refunded member contributions?

The four percent interest rate is required by Section 51.1-147 of the *Code of Virginia*.

How can a member roll-over a refund so that it is not taxed?

A member may instruct VRS to roll over the amount of her refund into another qualified employer retirement plan or to an individual retirement account. If the refund is not rolled-over, VRS is required to withhold 20 percent for federal income tax purposes. If the recipient of the refund is a Virginia resident, VRS is required to withhold an additional four percent for Virginia income tax purposes.

How does social security affect a retiree's VRS benefit?

VRS and social security are separate systems. Social security benefits do not affect VRS benefits. The only exceptions to this are if a member retires due to a work-related disability, retires due to regular disability with less than five years of service, or dies from a work-related cause while in service. In each case, a social security award will effectively decrease the VRS benefit.

➧ For related information, see pages II-7, II-11, II-46, II-49

How much of an individual's pre-retirement income will be replaced by the VRS benefit and social security?

That depends on the individual's years of service and salary at the time of retirement. For example, a State employee who retires at age 65 at a final salary of $25,000 and 30 years service will receive about 86 percent of his after-tax disposable income. A State employee who retires at age 65 at a final salary of $50,000 with 30 years service will receive about 92 percent of his after-tax disposable income. The income replacement ratio need not be over 100 percent, since all but the lowest paid employees might reasonably be expected to have personal savings to fill the gap.

When can an employee retire with unreduced benefits?

In order to receive a pension benefit without any reduction factor being applied, an employee must satisfy certain age and service requirements. These requirements vary depending on whether the individual is a State employee or teacher, a political subdivision employee, a State Police officer, or a judge.

State employees, teachers and most political subdivisions employees can retire with unreduced benefits at 65 years of age with five years service, or at 55/30. Some political subdivisions do not allow unreduced retirement at 55/30, and instead allow their employees who are at least 55 years old to retire when the sum of their age and years of service equals 90. State Police officers, and most local law enforcement personnel whose employers provide LEORS benefits, may retire at either 60/5 or 50/25. Some political subdivisions that provide LEORS benefits do not allow unreduced retirement at 50/25, but rather permit unreduced retirement at 55/30. Judges may retire at either 65/5 or 60/30.

While VRS members of sufficient age can retire with unreduced benefits with as little as five years of service, a greater number of years of service produces a larger pension benefit.

For related information, see pages II-5, II-36, II-41, II-44

What is the earliest that an employee can retire and receive some type of benefit?

State employees, teachers, and political subdivision employees may retire at 55 years of age with five years of service, or at 50/10. State police officers, and most local law enforcement personnel whose employers provide LEORS benefits, may retire at 50/5. Some political subdivisions only permit their law enforcement officers to retire early at 55/5.

A substantial reduction factor is applied to the benefits of individuals who choose to retire early. For example, an individual retiring at age 55 with 20 years service will receive only 46 percent of the benefit paid to someone, retiring at an identical age and salary, who has 30 years of service.

For related information, see pages II-5, II-44

Under what circumstances can a VRS member retire in the event of disability?

The VRS Medical Board reviews all disability retirement applications. A VRS member may receive disability retirement benefits if he or she is determined to be mentally or physically incapacitated for the further performance of duty and provided the incapacity is likely to be permanent.

For related information, see pages II-7, II-45 to II-46

Is an employee allowed to purchase additional service credit in order to increase his or her pension benefit?

Yes. Additional service credit may be purchased, provided that the employee satisfies at least one of the conditions required by the *Code of Virginia*. For example, an individual may purchase additional service credit, at a cost of five percent of salary for each year purchased, for time periods when the individual was on personal sick leave, maternity leave, educational leave, leave for temporary employment with the General Assembly, or for periods for which the employee has received a refund previously.

An employee may also purchase additional service credit, at a cost of 15 percent of salary per year purchased, for periods when he was covered under a different public employee retirement system, was in the federal civil service, or was in active military service.

In addition, an employee may be granted additional service credit at no cost under certain circumstances. If the member left a VRS covered position on a military leave of absence and returned to a covered position within 12 months of receiving an honorable discharge, he may be granted service credit. The employee may also receive credit if she is vested and as a teacher was required to go on involuntary maternity leave prior to July 1, 1974.

For related information, see pages II-8, II-46 to II-47, V-1

When should an employee submit his or her retirement application?

If VRS receives the completed retirement application 90 days prior to a member's retirement date, it guarantees that the first retirement check will be issued on time. Payments are made on the first of the month following the month for which the benefit is paid.

What type of pension benefit payment options are available?

A payment option is selected at the time that an employee applies for retirement. Available options include : basic benefit, 100 percent survivor option, 50 percent survivor option, leveling option, and a special survivor option. In general, an employee may not change the payment option once the retirement date has passed.

The basic benefit is the amount due based on an employee's average final compensation and years of service, calculated using the VRS benefit formula. At the time of a retiree's death, if the amount of his accumulated contributions plus four percent interest exceeds the amount of pension benefits that he received, the excess is paid to his designated beneficiary in a lump sum.

The survivor options allow a retiree to receive a reduced pension benefit and thereby provide a benefit to a second person (the contingent annuitant) after the retiree's death. The amount of benefit reduction for the retiree depends on (1) the age of retiree and contingent annuitant at the retirement date, (2) the age difference between the two individuals, and (3) the percentage of the pension benefit (up to 100%) designated by the retiree to be provided to the contingent annuitant.

The leveling option is basically a loan from VRS that allows the retiree to receive an amount larger than the basic benefit in the early years of retirement and repay the loan in the later years of retirement by receiving an amount less than the basic benefit. The VRS member determines the age at which the reduction will occur. Upon a member's death, his survivor does not receive a benefit, other than a refund of excess contributions.

For related information, see pages II-9, II-48

How much of a cost-of-living adjustment will a retiree receive?

The annual VRS cost-of-living adjustment (COLA) is based on the U.S. consumer price index (CPI). A retiree will receive a COLA equal to the first three percent in the CPI, plus one-half of the next four percent increase in the CPI, up to a maximum COLA of five percent.

When does a retiree start receiving a COLA?

The first COLA is paid on July 1 of the second calendar year after retirement. For example, if an employee retires on September 1, 1995 he will receive a COLA effective July 1, 1997.

For related information, see page II-48

How much does the COLA protect a retiree's pension benefit from inflation?

That depends upon the actual inflation rate. The COLA provides complete protection from inflation, if the annual inflation rate is no more than three percent. Taking as an example a State employee who retires after 20 years of service with a final average salary of $25,000, four percent inflation will erode three percent of the benefit after 20 years while six percent inflation will erode 14 percent of the benefit after 20 years.

Social security benefits offer full protection from inflation. A substantial portion of a VRS retiree's total retirement income is from social security. This helps to lessen the impact of the fact that the VRS benefit is not fully protected from inflation.

Is the VRS pension benefit taxable?

The VRS benefit is subject to federal income tax and, if the retiree resides in Virginia, to State income tax. The amount of tax due is based on total taxable income and the number of deductions claimed. However, if the retiree paid his member contribution on an after-tax basis, a certain portion of each pension check is excluded from State and federal income tax. In the event that a retiree lives longer than the life expectancy used in Internal Revenue Service regulations, the entire benefit is again taxable.

How can an employee determine the amount of his or her pension benefit at an assumed future retirement date?

Upon request, VRS staff can prepare an estimate of an active member's future pension benefit. Employers may also prepare benefit estimates if they have requested benefit calculation software from VRS. In addition, an employee may calculate his or her own benefit estimate using VRS benefit calculation software available on the Internet, or through information published in the *Handbook for Members*.

Is the VRS benefit subject to attachment by creditors or the courts?

The *Code of Virginia* allows VRS benefits to be attached in the following instances: pursuant to an IRS tax levy, to satisfy a debt to a member's employer, to pay child support, or to make alimony payments or satisfy other marital property rights as stated in a qualified domestic relations order or a divorce decree.

How much life insurance coverage does an employee have through VRS?

An employee's coverage equals the amount of her annual salary, rounded to the next highest thousand, and then doubled. In the event of accidental death, the amount of coverage equals annual salary rounded to the next highest thousand and then quadrupled. In addition, VRS members have the option of purchasing additional life insurance coverge.

➧ For related information, see pages II-12 to II-13, II-49 to II-50

Is the amount of a member's life insurance coverage reduced after retirement?

Yes. A retiree's natural death coverage reduces at the rate of two percent each month until it reaches 25 percent of its original value. It takes a little more than three years for the maximum reduction to occur. Coverage for accidental death and dismemberment ceases at retirement.

➧ For related information, see pages II-12 to II-13, II-49 to II-50

What other types of VRS benefits, besides life insurance, are available to a retiree's survivors upon his death?

Survivor benefits may be payable upon a retiree's death. The amount of the survivor benefit depends on the pension benefit payment option that the member selected. Under the basic benefit or the leveling option, the survivor receives an amount equal to the difference -- if any -- between the retiree's accumulated member contributions plus interest and the total pension benefits that were received. If a survivor option is selected, the contingent annuitant will receive either 100 percent or 50 percent of the retiree's pension benefit. Under either the basic benefit or a survivor option, the beneficiary has the choice of receiving instead a lump sum refund of the retiree's accumulated member contributions plus interest.

If an employee dies while still in active service, a death benefit is payable. The amount of the death benefit depends on the individual's age at the time of death, and whether or not the death was work-related. If death occurs prior to age 65 from a non-work related cause, the survivor will receive an amount equal to one-half of the 50 percent survivor option. If death occurs after age 65 from a non-work related cause, the survivor will receive an amount equal to the 100 percent survivor option. If an employee dies from a work-related cause, and if the survivor qualifies for social security benefits, the survivor will receive 33.3 percent of the employee's average final compensation plus a refund of the member contributions and interest. If the survivor does not qualify for social security survivor benefits, the benefit equals 50 percent of the employee's average final compensation, plus a refund of contributions and interest.

➧ For related information, see pages II-9, II-11, II-48 to II-49

How do benefits for State Police, local law enforcement officers and firefighters, and judges differ from those for State employees, local employees and teachers?

The basic benefit structure is similar for each of the employee groups, but there are a few significant differences. First, State police and local law enforcement officers and firefighters of participating localities are generally eligible for full retirement benefits at an earlier age. Retired state police, local law enforcement officers, and firefighters with 20 years of service also receive a monthly supplemental pension benefit until age 65.

Unlike the other employee groups, judges receive a benefit multiplier equal to a straight 1.65 percent. Judges also receive a service credit multiplier of either 3.5 or 2.5 depending on the date of their election or appointment. However, judges cannot retire with unreduced benefits until they have attained age 60 and 30 years of service credit.

Finally, not all of the political subdivisions provide the additional three percent pension benefit that was authorized by the General Assembly in 1994.

➧ For related information, see pages II-4 to II-15, II-40 to II-51

Should an employee begin receipt of retirement payments when he first becomes eligible, or should he defer his retirement until later in life?

If a member who is eligible to retire considers delaying his payout, it is usually with the idea of taking a smaller benefit reduction by waiting until an older age to begin receiving benefits. A member should compare this increase in benefits to the income that would have been received by starting receipt of benefits earlier. In addition, COLA payments do not begin until a member starts to receive benefits. Also, a member loses the right to participate in the State health insurance plan by deferring receipt of pension payments.

How is an employee's State health insurance coverage affected when she retires?

A retired State employee may enroll in the State's group health insurance plan within 31 days of terminating employment, provided that she does not defer retirement. The entire amount of the premium must be paid by the retiree. However, if the member has at least 15 years of State service, she is eligible to receive a monthly credit of $2.50 for each year of service, up to a maximum of $75.00, to be applied to her health insurance premium. The credit is payable whether or not the retiree is enrolled in the State's group health insurance plan.

➧ For related information, see pages II-14, II-50

How does the deferred compensation plan work?

A State employee may elect to contribute, on a pre-tax basis, up to 25 percent of her compensation (or $7,500 whichever is less) to the deferred compensation program administered by VRS. The amount contributed is invested by professional investment managers, and a range of investment options are available. The amount contributed, along with the investment earnings, accumulates on a tax-deferred basis until the amounts are distributed, generally after retirement. The deferred compensation plan can be used to supplement the amount of a member's VRS benefit.

➧ For related information, see page II-15, II-50 to II-51

How can an employee find out more about VRS benefits and retirement planning?

A good source of information is the Pre Retirement Education Program (PREP) offered throughout the year, at various locations throughout the State, by VRS. This program is also available on videotape from VRS.

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Part I: Organization, Management, and Oversight Structure

A retirement system for State employees is required by the *Constitution of Virginia*. Article X, Section 11 states that "The General Assembly shall maintain a state employees retirement system to be administered in the best interest of the beneficiaries thereof and subject to such restrictions or conditions as may be prescribed by the General Assembly." This constitutional mandate necessitates close and continual oversight of the Virginia Retirement System by the legislative branch.

Since the enactment of major reform legislation by the 1994 General Assembly, the organization and management of the Virginia Retirement System (VRS) has been undergoing significant change. These changes include the establishment of a new board of trustees, along with new investment and real estate advisory committees; the hiring of a new director and a chief investment officer; the designation of VRS as an independent State agency; and the creation of a new legislative oversight structure for VRS. As a result of these changes in its governing structure and top management, additional significant changes are occurring throughout the VRS staff and planning structure.

Board of Trustees and Advisory Committee Structure

VRS is governed by a nine-member board of trustees (the board). The board has several statutory responsibilities including appointing a director and a chief investment officer, employing an actuary to perform a biennial actuarial valuation, publishing an annual financial report, and issuing regulations for the administration of the retirement system. The board has three standing committees: administration and personnel, benefits and actuarial, and audit.

The 1994 General Assembly increased the number of VRS trustees from seven to nine, and required that four of the nine be appointed by the Joint Rules Committee. The qualification requirements for trustees were also changed, primarily by requiring that four trustees have at least five years of investment experience and that one other trustee have at least five years of experience in the administration of employee benefit plans. Currently, those five trustees are all employed in, or retired from, the private sector.

The board appoints qualified individuals to its investment advisory committee (IAC) and to its real estate advisory committee (REAC). The statutory responsibility of both committees is to provide the board with "sophisticated, objective, and prudent investment advice." The members of each committee, which both consist of seven members, are required to have extensive investment experience. The 1994 VRS legislation gave each of the advisory committees statutory standing, along with specific responsibilities and member qualification requirements.

Management and Staffing Structure

VRS has 136 staff positions, making it a relatively small but growing State agency. VRS staff perform four major functions. First, the majority of VRS staff administer benefit programs, process applications for benefits and maintain member records. Second, approximately 20 staff manage and monitor VRS investments while also providing support to the IAC and REAC. Third, a small number of staff, including top management, provide direct support to the board of trustees and its standing committees. Finally, other staff provide internal agency support in the areas of accounting, human resources, procurement, payroll, budgeting, information systems, technology support, data processing, and internal audit.

VRS is an independent State agency, and as such is outside of the executive, legislative and judicial branches of government. While VRS is not exempt from all statutory and regulatory procedures generally applicable to State agencies, it is exempt from several key constraints. First, even though it must still submit its budget to the Department of Planning and Budget (DPB) for review and approval, in practice VRS is now exempt from any cap on the number of agency employee positions as set by DPB. Second, VRS is not bound by the compensation, position classification and performance evaluation system designed and administered by the Department of Personnel and Training. VRS employees are exempt from the Virginia Personnel Act. Third, VRS is not obligated to use the procurement system administered by the Department of General Services. However, VRS still must comply with the provisions of the Virginia Public Procurement Act. Furthermore, a recent opinion of the Attorney General stated that VRS must continue to comply with the Comptroller's regulations and procedures governing reimbursement of official travel expenses.

Strategic Planning Process

Through the development of its first-ever strategic plan, VRS management is attempting to position VRS to operate effectively and efficiently as an independent agency. Based on a mission and values statement for the entire agency, the strategic plan will aim to integrate departmental goals and objectives, data processing plans, training plans, staffing plans and the agency's biennial budget. The strategic planning process represents a significant step forward in the administration and management of VRS.

The VRS strategic plan is being developed in a bottom-up, participatory manner. A key element of the process has been a series of meetings between employees from each VRS work unit with facilitators from Virginia Commonwealth University. The objective of these meetings is to discuss the mission and values of the agency, and to provide recommendations for customer service improvements. Other key elements of the strategic planning process include surveys of VRS active members, retirees and employers. These surveys are intended to identify issues of concern to these constituent groups, and to help VRS address how best to respond to those concerns.

Legislative Oversight Structure

The legislative oversight structure for VRS is multi-faceted. JLARC, the two legislative money committees, and the Auditor of Public Accounts (APA) each play a role. The Virginia Retirement System Oversight Act (the Oversight Act), passed by the 1994 General Assembly, provides the statutory framework for ongoing legislative monitoring and evaluation of VRS. Under the provisions of the Oversight Act (§30-78 through §30-84 of the *Code of Virginia*), JLARC is required to oversee and evaluate VRS on a continuing basis and to perform special studies and reports as requested by the General Assembly or either of the two money committees.

The JLARC VRS Oversight Subcommittee provides direction and guidance to the oversight activities performed by JLARC staff. Under the provisions of the Oversight Act the areas of review and evaluation to be conducted by JLARC shall include, but are not limited to, the following:

- ❑ Structure and governance of the retirement system,
- ❑ Structure of the investment portfolio,
- ❑ Investment practices, policies and performance, including the effect of investment performance on employer contributions,
- ❑ Actuarial policy and the actuarial soundness of the trust funds, and
- ❑ Administration and management of the retirement systems.

The Oversight Act requires the preparation of several different reports and publications concerning VRS. These include the following:

- ❑ An informational guide to VRS for members of the General Assembly,
- ❑ A semi-annual investment report,
- ❑ A biennial status report, and
- ❑ A quadrennial actuarial report.

***Legislative Money Committees*.** The Senate Finance Committee and the House Appropriations Committee both have important VRS oversight responsibilities. During the General Assembly Session, each committee is responsible for reviewing and evaluating the cost and merit of legislation affecting VRS. This includes bills to change the level or structure of benefits, as well as Appropriations Act provisions affecting contribution rates. Committee staff, with the assistance of the legislative actuary - Foster Higgins - coordinate the review. VRS staff and the VRS actuary also play a key role in the review of legislation by providing necessary information and fiscal impact statements to the committee.

Both money committees continue their oversight during the interim period between sessions. Committee staff contact VRS staff on an informal, as needed, basis as legislative questions and issues arise. In addition, both committees typically have VRS staff make a presentation at least once during the interim period on issues of legislative interest and concern.

Auditor of Public Accounts. The APA conducts an annual financial audit of VRS. The purpose of the audit, which evaluates the retirement system's overall financial statement, is to obtain reasonable assurance that the financial statement is free of material misstatement. The audit also assesses the accounting principles used, and significant estimates made, by VRS management. The Oversight Act requires that the APA report the findings of the annual audit to the Governor, the General Assembly, JLARC, and the VRS board on or before the first day of the General Assembly Session.

VRS Board of Trustees

Trustee	Board Seat Held	Occupation/Employer	Appointed by	Current Term Expires
James C. Wheat, III (Chairman)	Investment Expert	Partner, Riverfront Partners	Governor Allen	2/28/2000
R. William Bayliss, III	Employee Benefit Plan Expert	Managing Director, Wheat First Securities	Governor Allen	2/28/97
Dr. Joseph L. Boyd, CPA	Faculty Member/Employee of State-Supported Institution of Higher Education	Dean, School of Business, Norfolk State University	Governor Allen	2/28/99
Edwin Thomas Burton, III	Investment Expert	Investment Banker	Governor Allen	2/29/2001
Donald L. Cahill	Political Subdivision Employee	Police Officer, Prince William County Police Department	Governor Allen	2/28/98
Stuart W. Connock	State Employee	Commonwealth of Virginia (retired)	Joint Rules Committee	2/28/2001
Clifford A. Cutchins, III	Investment Expert	Chairman of the Board (retired), Sovran Financial Corporation	Joint Rules Committee	2/28/98
Elise L. Emmanuel	School Teacher	Williamsburg/James City County Schools	Joint Rules Committee	2/28/97
Charles B. Walker	Investment Expert	Vice Chairman and Chief Financial Officer, Ethyl Corporation	Joint Rules Committee	2/28/99

Note: Each trustee with exception of James Wheat is eligible to be reappointed to an additional five-year term.

Source: Virginia Retirement System.

VRS Investment Advisory Committee

Member	Occupation/Employer	Current Term Expires
Gordon W. Binns, Jr. (Chairman)	President (retired), General Motors Pension Fund	3/31/98
Edwin T. Burton, III	Investment Banker (also a VRS trustee)	No expiration date
Alice W. Handy	Treasurer, University of Virginia	3/31/97
David B. Loeper	Director of Investment Consulting, Wheat, First Butcher Singer, Inc.	3/31/98
Louis W. Moelchert, Jr.	Vice President for Business and Finance, University of Richmond	3/31/97
J. Garnet Nelson	President, Mid-Atlantic Holdings, LLC	3/31/97
Arthur A. Watson, Jr.	Partner, BDF Management, Inc.	3/31/98

Note: All members are eligible to be re-appointed for two additional two-year terms after the expiration of their current terms. As a VRS trustee, Edwin Burton's term as an IAC member does not have an expiration date.

Source: Virginia Retirement System.

VRS Real Estate Advisory Committee

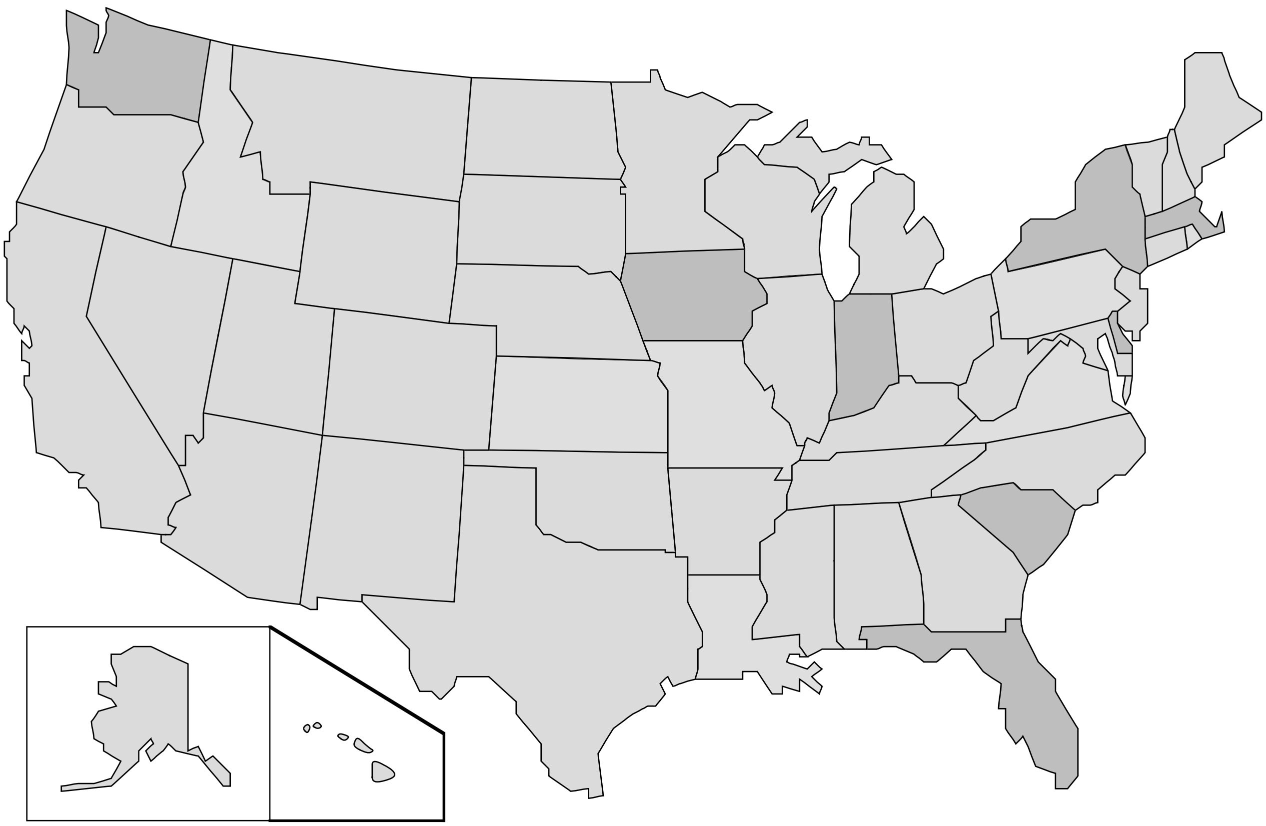
Member	Occupation/Employer	Current Term Expires
James S. Watkinson (chairman)	Chairman and Chief Executive Officer, Morton G. Thalhimer	3/31/98
James H. Boykin, Ph.D	Professor of Real Estate, Virginia Commonwealth University School of Business	3/31/98
Robert G. Butcher, Jr.	Managing Partner, Builder Resource and Development Company	3/31/98
Donald L. Cahill	Police Officer, Prince William County Police Department (also a VRS trustee)	No expiration date
Doyle E. Hull	Chairman, Norfolk Redevelopment & Housing Authority	3/31/97
Thomas G. Johnson, Jr.	Managing Partner, Wilcox & Savage, P.C.	3/31/97
C.B. Robertson, III	President, CBR Associates, Inc.	3/31/97

Note: All members are eligible to be re-appointed for two additional two-year terms after the expiration of their current terms. As a VRS trustee, Donald Cahill's term as an REAC member does not have an expiration date.

Source: Virginia Retirement System.

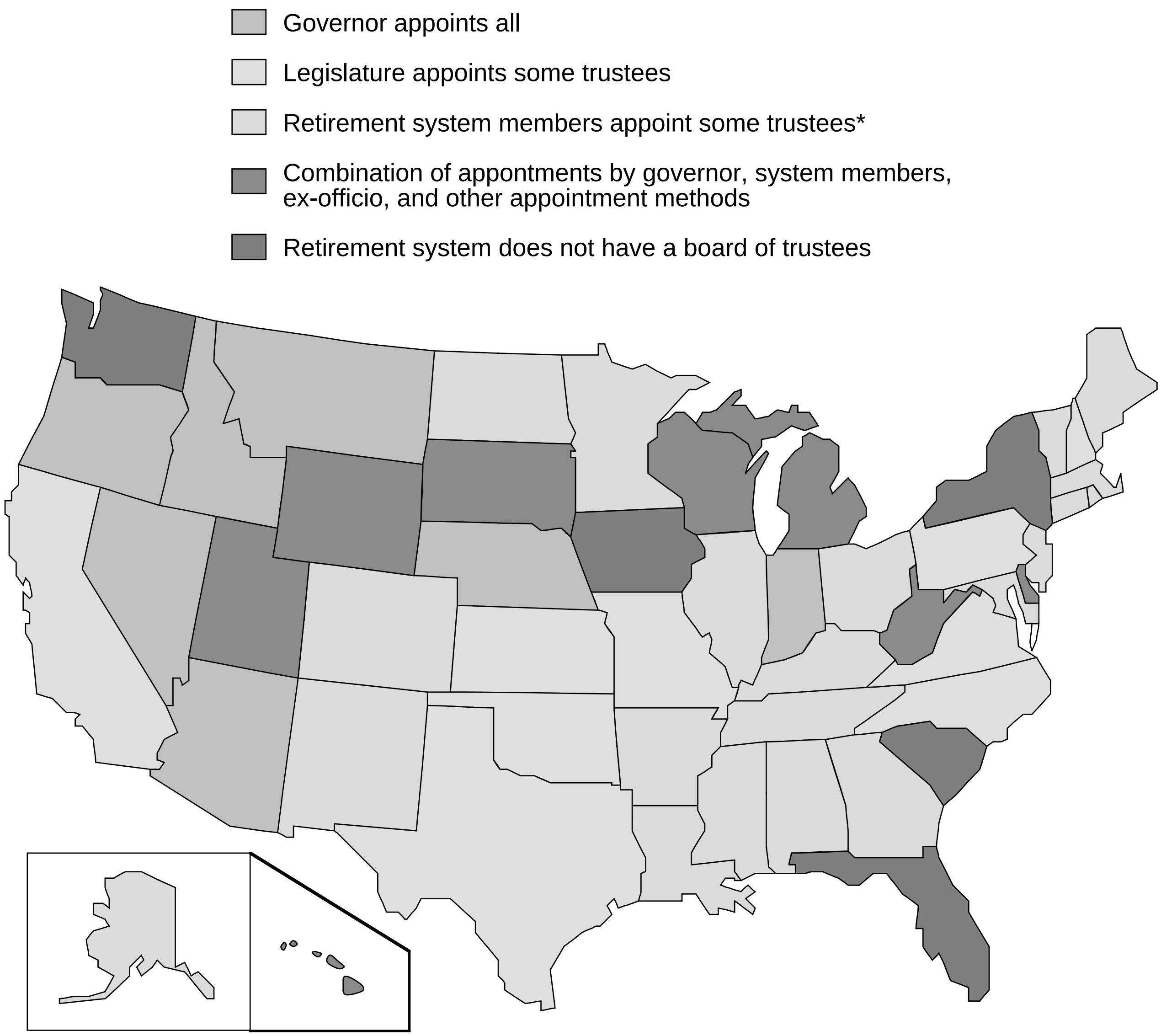
Composition of the Boards of Trustees for the States' Retirement Systems

- Retirement system members/beneficiaries and state ex-officio trustees hold majority of board seats
- Non-members/beneficiaries hold majority of board seats
- Require legislative representation on the board
- Statutory requirements do not completely specify member vs. non-member board seats
- No board of trustees



Source: JLARC staff analysis of state retirement statutes.

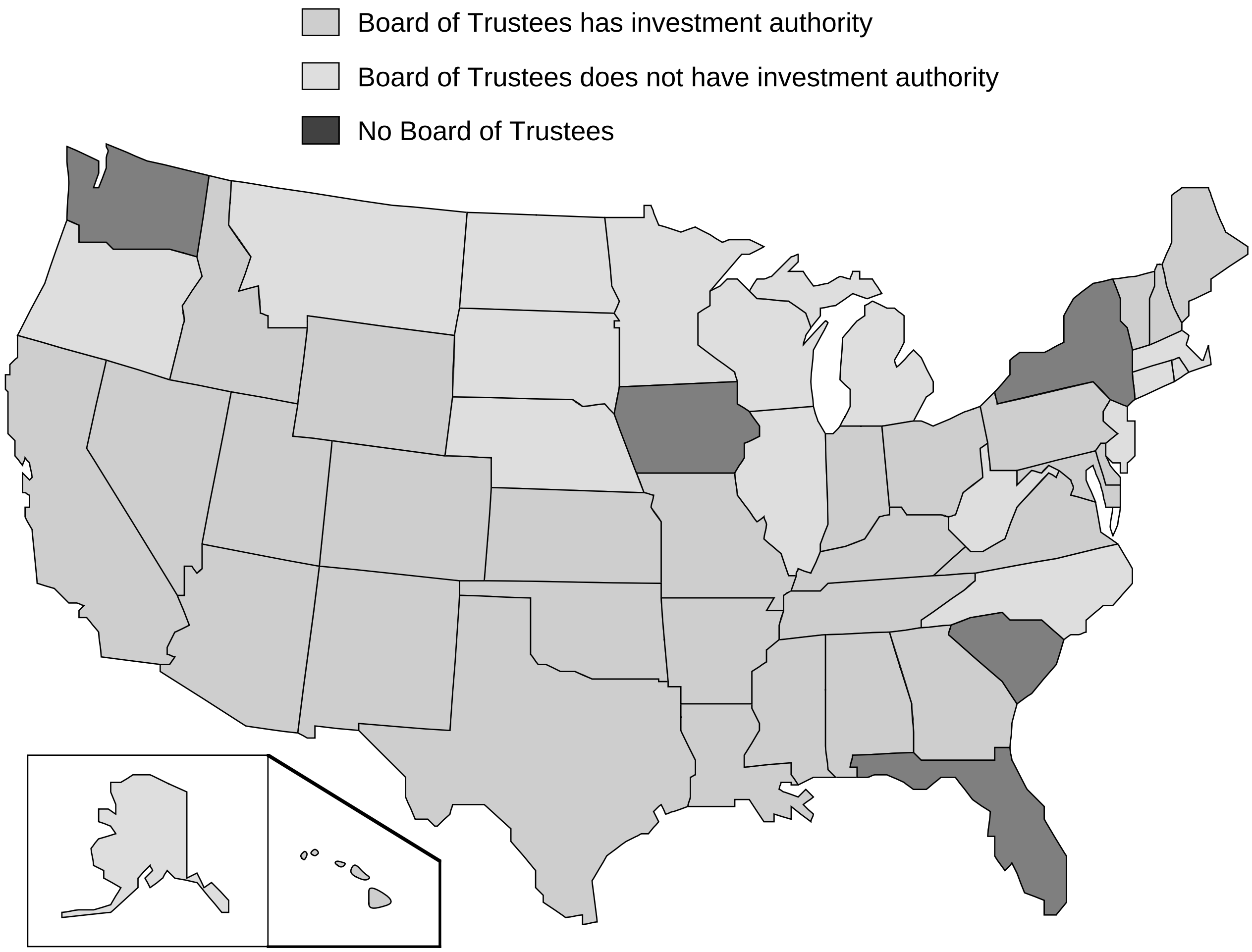
Board of Trustees Appointment Mechanisms



*System members also appoint some members in California, Kansas, Missouri, and New Hampshire.

Source: JLARC staff analysis of state retirement statutes.

Board of Trustees Investment Authority



Source: JLARC staff analysis of state retirement statutes and annual reports of the other state retirement systems.

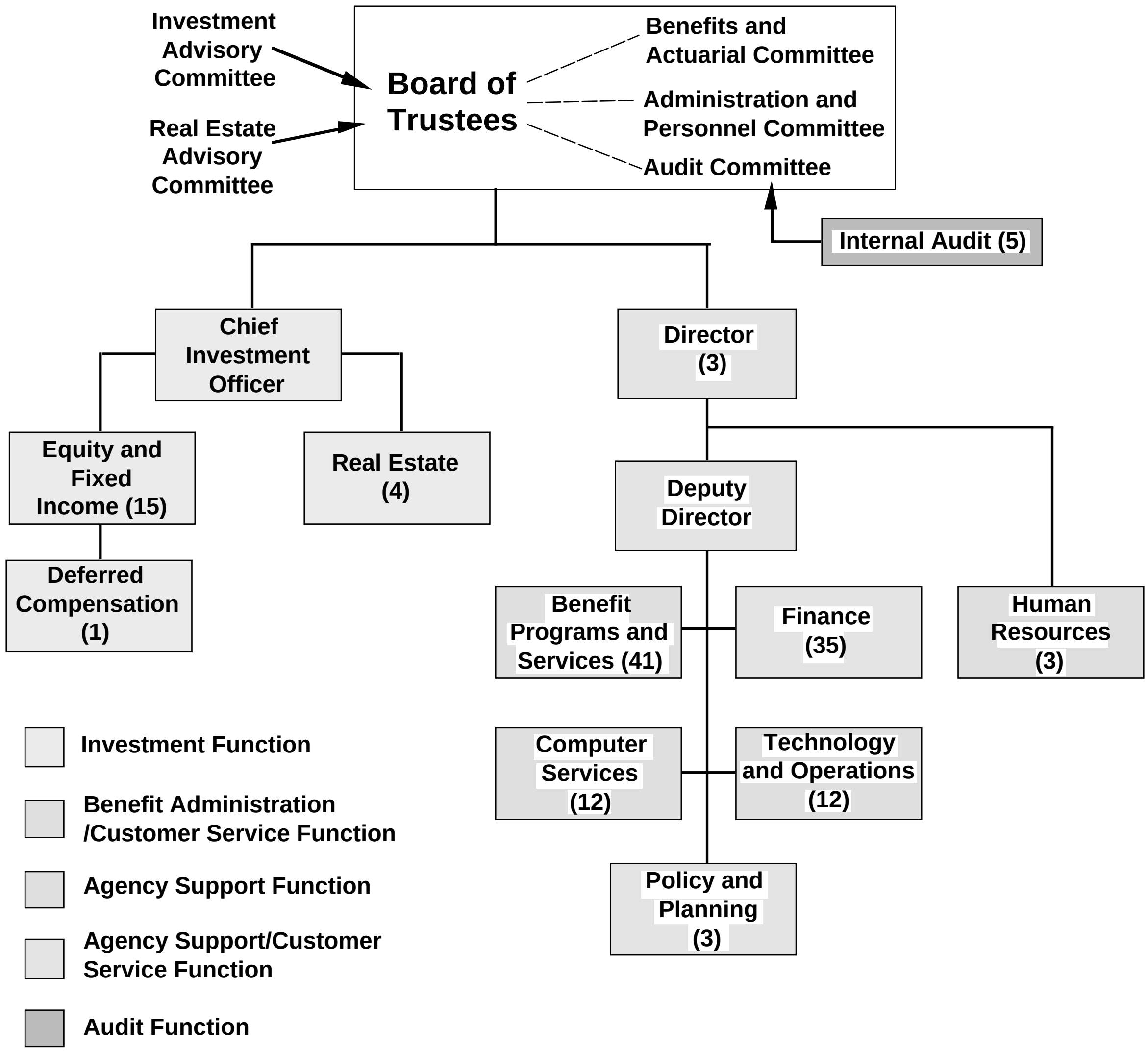
Professional Qualification Requirements for Trustees

State	Requirement	Total Number of Trustees
Arizona	Each trustee must have five years of administrative management experience	7
California	One trustee must be an official of a life insurance company	13
Connecticut	Two trustees must be enrolled actuaries	15
Georgia	One trustee must have ten years of investment experience	7
Hawaii	One trustee must be a bank officer	7
Kansas	Six trustees must have demonstrated experience in one of the following: finance, investment management, actuarial analysis or benefit plan administration	9
Maine	Two trustees shall have experience or training in one of the following: investments, accounting, insurance, banking, or law	8
Maryland	Two trustees shall be knowledgeable in the administration and operation of pension systems and trust funds	15
Minnesota	One trustee shall be knowledgeable of pension matters	11
North Dakota	One trustee shall have money management experience	7
Oklahoma	Four trustees shall have experience in one of the following: investments, banking, law or accounting	13
Rhode Island	One trustee shall be a chartered life underwriter competent in the area of pension benefits	15
Utah	Four trustees shall have experience in investments or banking	7
Virginia	Four trustees shall have five years of experience in investments. One trustee shall have five years of experience with employee benefit plans	9

Note: The other 36 states do not have specific professional qualification requirements.

Source: JLARC staff analysis of other state employee retirement system statutes.

VRS Governing, Advisory and Staff Organization



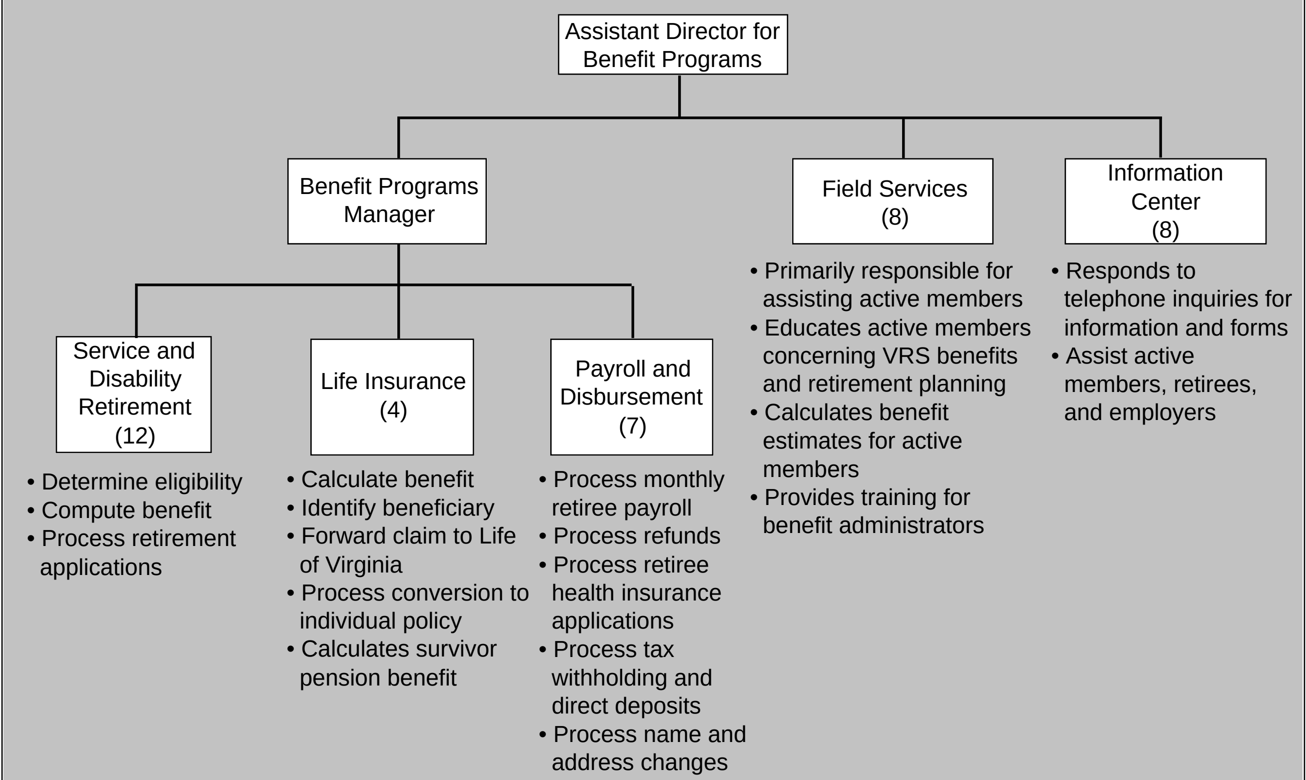
Total of 136 Full-Time Staff Positions*

Note: Number of staff posiitons in parenthesis.

*Does not include the Chief Investment Officer, which is a contractual position not included in the position level.

Source: JLARC staff analysis of VRS documents.

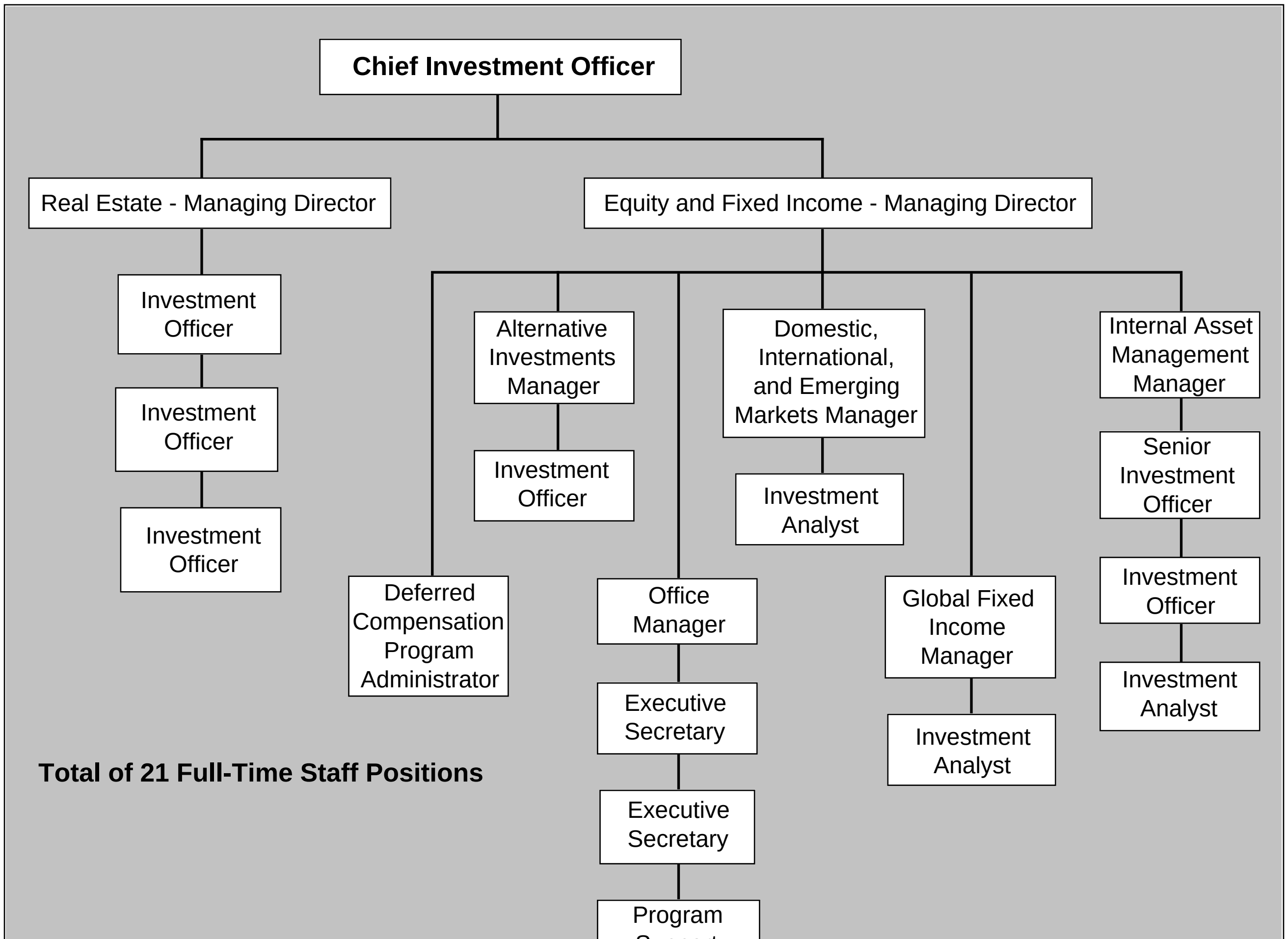
Benefit Programs and Services Department



Total of 41 Full-Time Staff Positions

Source: JLARC staff analysis of VRS documents, and interviews with VRS staff.

Investment Department



Source: Virginia Retirement System.

Finance Department

Assistant Director for Finance

Controller

General Accounting (11)

- Assure invested portfolio assets are properly recorded, reconciled, and safeguarded
- Reconcile VRS general ledger to monthly report from custodian bank
- Prepare monthly financial statements
- Maintain general ledger

Membership Accounting (15)

- Primarily responsible for assisting active members, inactive members and employers
- Process monthly payroll reports from employers
- Answers inquiries from active and inactive members concerning account balances
- Research member records concerning prior service, salaries, contributions, etc. in order to answer inquiries
- Administer the preparation and distribution of member benefit profiles
- Process requests for purchase of prior service credit

Employer Control (4)

- Ensures that member records reconcile to employer files and transaction file
- Maintain internal controls by serving as intermediary between VRS payroll and disbursement staff and Department of Accounts
- Reconciles VRS general ledger to CARS and Treasury

Purchasing (2)

- Responsible for all agency procurement

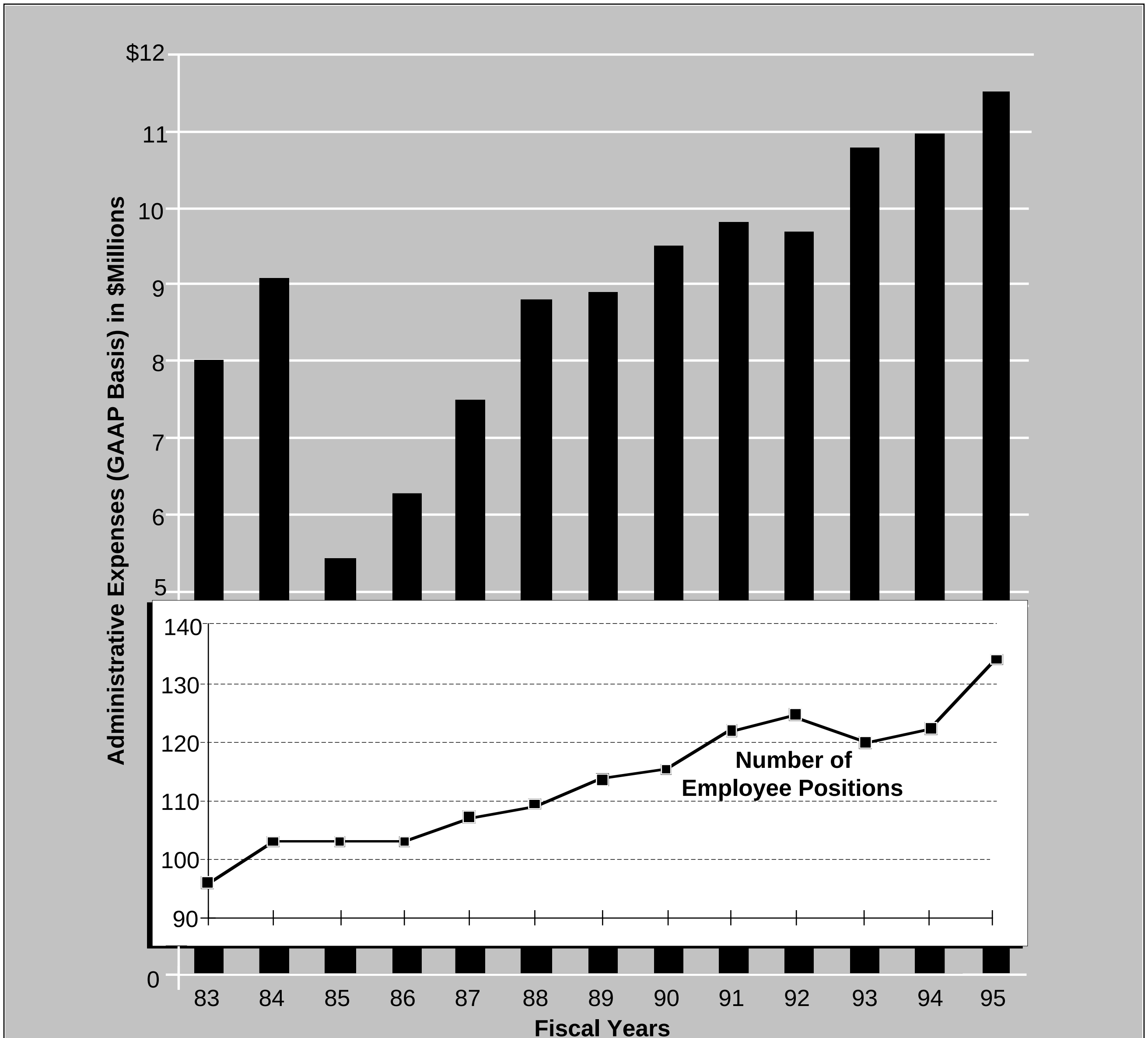
Budget (1)

- Provides staff support to management in the area of budget development, execution and monitoring

Total of 35 Full-Time Staff Positions

Source: JLARC staff analysis of VRS documents, and interviews with VRS staff.

VRS Adminstrative Expenses and Employee Positions



Source: JLARC staff analysis of VRS annual report data and employment data.

VRS Strategic Planning Process - Emerging Themes	
Meeting the Needs of a Changing Environment	People nearing retirement are more sophisticated and creative in their personal financial planning People are planning for retirement earlier than ever Does VRS want to be more than just a processor of pension checks? A revised VRS role has implications for staff training, use of technology and the VRS organizational structure
Concern for Customers	Customer needs are shifting dramatically as people plan earlier for retirement and face more complex financial and lifestyle options VRS staff recognize that members are often facing “trauma” at the time they contact VRS for information and assistance
Technology and Workload Management	VRS staff are concerned about the amount of time consumed by repetitive and routine tasks Some tasks could be consolidated and/or automated, freeing staff to deal with more complex administrative and customer issues
Communication and Information Sharing	VRS staff desire to understand and participate more with other departments and units in the agency Cross-agency information sharing will enable staff to become more responsive to customers
Training	VRS staff want training in the use of information technology, team building, and personal/career development
Morale	Morale is highly variable depending on where one works within VRS Units that received majority of inquiries during Workforce Transition Act feel frustrated and stressed

Source: JLARC staff review of *Results of Staff Focus Groups*, prepared by Virginia Commonwealth University Center for Public Policy, May 1, 1995.

VRS Administrative Projects

Project	Description
Development of New Retiree Payroll System	The new system includes many new features designed to improve efficiency and effectiveness of payroll processing. These include on-line inquiries and transactions, automatic payments to third-party payees, expanded options for direct deposit of retirement checks, ability to balance the payroll on a daily basis, and improved linkage with the Retirement Information Management System.
Interactive Voice Response Feature for Telephone System	This will enable callers to directly access information, including member account balances, stored in VRS databases. The intent of interactive voice response is to make it easier and more convenient for VRS members to obtain important information from VRS.
Consultant Study of Information Systems and Technology Planning	Examination by KPMG Peat Marwick of current data processing environment. Analysis of technical strengths and weaknesses of VRS staff. Recommendation of new technologies for consideration by VRS, including costs, benefits, and potential staffing changes associated with such technology. Development of a seven-year technology plan for VRS.
Process Improvement Teams	Teams of VRS employees examined ways to increase telephone response time and retiree participation in direct deposit; evaluating VRS training programs and retirement planning software, and assessing the feasibility of a four day workweek for VRS.
State Kiosk Project	VRS has submitted an application to include pension benefit estimates as a feature on State information kiosks to be located throughout the State. The project is still under evaluation by the Council on Information Management.
Purchase of Additional Imaging Workstations	15 additional imaging workstations will be obtained. This will alleviate a shortage of workstations in the disability retirement and life insurance units.
Development of Automated Procurement System	New system will enable VRS staff to enter purchase requests on-line, rather than manually completing a requisition form. The new system, which will be linked to the general ledger, will generate purchase orders and management reports.
Development of Oversight Structure for Deferred Compensation Program	New structure by which VRS staff will monitor the performance of the third-party administrator, and the five investment managers, hired to administer the program.
Revision of Death Claims Subsystem	Revised system will automatically calculate the amount of pension death benefits and life insurance benefits.

Source: JLARC interviews of VRS staff and review of VRS documents.

Technology and Software Applications Recently Acquired or Developed by VRS

Application (Year Acquired)	Description
Document Imaging System (1992)	Scans, processes and maintains member documents on optical disk storage. Provides greater control over documents, enables more efficient benefit processing. Other features include an audit trail and an electronic tickler file.
Benefit Calculation Subsystem (1994)	Calculates retirement benefits for members who apply for retirement or who want an estimate of their retirement benefits.
Digital Automatic Private Exchange Telecommunications System and Information Center (1995)	New telephone system features an increased number of telephone lines, pre-recorded answers to frequently asked questions, automatic call distribution directing callers to appropriate workgroups, estimated waiting times for callers, ability to transfer to a VRS employee by entering either an extension number or name, voicemail, and calculation of statistics for management reporting. New telephone system forms the core of the VRS Information Center. The Information Center staff respond to telephone inquiries of active members, retirees, and employers.
Installation of Local Area Network (1995)	This links the Novell network, used by the investment, investment accounting, internal audit staff, and some administrative staff, with the imaging network used by the benefits staff. All VRS staff are now able to communicate using electronic mail.
Purchase of Prior Service Credit Subsystem (1995)	Enables on-line processing of applications for request of prior service credit. Automatically generates acknowledgment letter to member.
General Ledger Subsystem (1995)	Contains accounting information for all VRS funds as well as accounts receivable, contribution and benefit information for all VRS employers. Contains agency-specific information not available in CARS. Provides information for management reporting and actuarial studies.
Personal Computer Version of Benefit Calculation Subsystem (1995)	Benefit calculation software distributed to VRS employers upon request, and after a licensing agreement is signed. This software is also available through Virginia On-Line and the Internet.
Presentation of Preretirement Education Program via Statewide Video Conference (1995)	Program focusing on retirement planning and VRS benefits presented simultaneously via video conference at eight sites across the State.
Electronic Transfer of Retiree Eligibility Data for State Health Benefits Program (1996)	Eliminates the transfer of paper applications to Trigon Blue Cross/Blue Shield and the maintenance of two separate computer systems

Source: JLARC staff interviews with VRS staff, and analysis of VRS documents.

Political Subdivisions with Employee Retirement Systems Independent of VRS

Political Subdivision	Type of Retirement Plan
Cities	
Charlottesville	Defined Benefit
Danville	Defined Benefit
Falls Church	Defined Benefit
Newport News	Defined Benefit
Norfolk	Defined Benefit
Portsmouth	Defined Benefit
Richmond	Defined Benefit
Roanoke	Defined Benefit
Counties	
Arlington	Defined Benefit
Fairfax	Defined Benefit
Powhatan	Defined Contribution
Towns with Population Greater than 5,000	
Farmville	Defined Contribution

Note: Section 51.1-800 of the *Code of Virginia* requires political subdivisions with a population greater than 5,000 to provide a retirement system for their employees either by participating directly in VRS, or by establishing a local retirement system that equals or exceeds two-thirds of the service retirement allowance that the employee would have received from VRS. VRS is responsible for determining compliance by each political subdivision with the standard. Localities will forfeit Alcoholic Beverage Control profits if they fail to comply with the standard.

Source: Virginia Retirement System.

Contents of Part II: Benefit Programs and Services

Part II: Benefit Programs and Services

The entire VRS benefit and membership structure is designed and modified according to legislation enacted by the General Assembly. The key elements of the benefit structure include the types of benefits offered to members, the amount of each benefit, and conditions of eligibility for receipt of each benefit. Although VRS is frequently referred to as the State retirement system, State employees constitute only one part of the VRS membership. Taken together, teachers employed by local school boards and employees of political subdivisions actually comprise the large majority of VRS members.

VRS is responsible for administering numerous benefit programs that have been created by the General Assembly. These programs include service and disability retirement, pension death benefits, life insurance, deferred compensation, and the retiree health insurance credit. VRS staff are also responsible for implementing legislated changes to the benefit structure.

VRS Benefits Are Generous and Competitive

Overall, the pension benefit provided by the VRS defined benefit plan is extremely competitive with benefits provided by other state employee retirement systems. Several key factors are responsible for the overall strength of the VRS benefit structure:

- ❑ VRS members are covered by social security which increases their total retirement benefit.
- ❑ The benefit multiplier is close to the average multiplier of those state retirement systems which provide social security benefits.
- ❑ Final average compensation used to determine the benefit is calculated over a relatively short period of 36 months.
- ❑ Unreduced retirement benefits may be received after as few as five years, provided that the employee is 65 years old.
- ❑ Automatic cost-of-living adjustments, based on increases in the U.S. consumer price index, are paid annually.
- ❑ An employee leaving state service may receive a refund of his member contributions plus four percent interest after a relatively short five-year vesting period.
- ❑ The State, and most its political subdivisions, pays the full amount of the required member contribution, which is five percent of creditable compensation.

Perhaps the single biggest disadvantage of the VRS pension benefit structure is the age requirement for receipt of an unreduced benefit with 30 years of service. State employees and teachers must be 55 to retire with 30 years of service. Unlike Virginia, several other states allow employees with 30 years of service to retire with full benefits regardless of their age.

Recent Changes in VRS Benefit Structure

The VRS benefit structure has become increasingly competitive and generous, and also more complex, over the past 15 years. While a few entirely new benefits have been added, such as the retiree health care credit and the optional life insurance program, most of the changes in the benefit structure have resulted from modifications of existing benefits. For example:

- ❑ Age and service requirements for receipt of an unreduced pension benefit were reduced in 1987 and 1990.

- ❑ Benefit formulas and multipliers for service and disability retirement were significantly revised in 1990.
- ❑ The ability of employees to purchase additional service credit was increased several times throughout the 1980's and 1990's.
- ❑ An additional three percent pension benefit supplement was enacted in 1994, and made optional for political subdivisions.
- ❑ Eligibility for early retirement, with a reduced benefit, was expanded in 1995.
- ❑ The retiree health care credit for teachers was made mandatory, with the cost to be paid by the State, effective July 1, 1998.

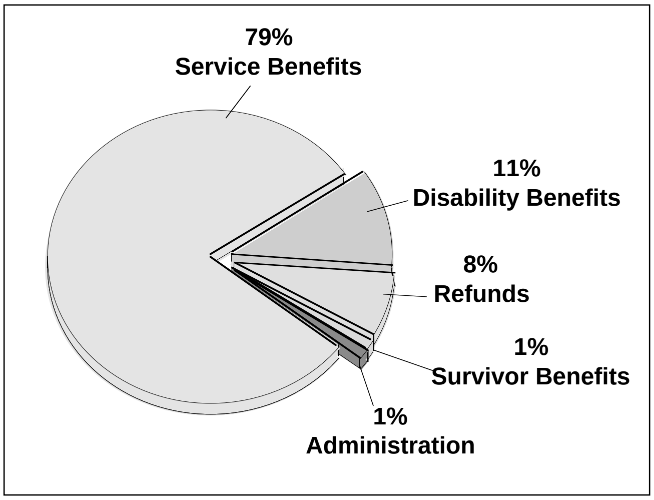
Administration of VRS Benefits

The period of time during which VRS benefits have been increased and made more generous has coincided with increasing administrative and operational challenges for VRS management and staff. These challenges have resulted from several factors, one of the most important being a growing membership. The increasing number of members - particularly retired members - has placed great demands on the VRS customer service and retirement payroll functions. For example, not only has the number of requests for information and benefit calculations increased, but the questions asked by VRS members are becoming more sophisticated and difficult to answer. This is a function of the growing complexity of the retirement statutes, as well as a reflection of increased financial sophistication on the part of VRS members.

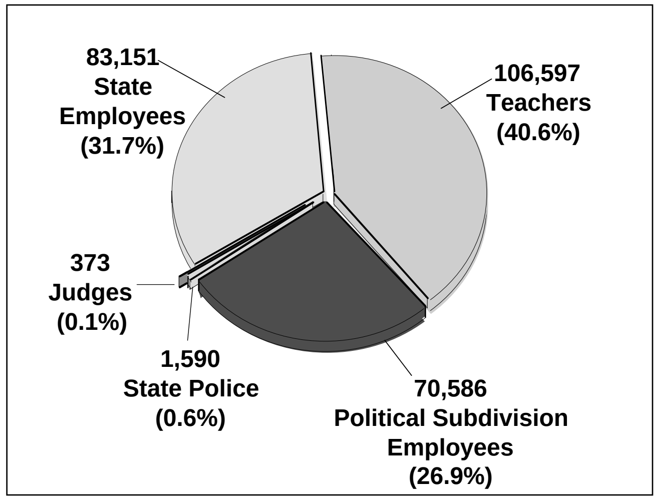
Other factors, not directly related to the increased number of members, are also creating operational challenges for VRS. An early retirement incentive window program in 1991 and the Workforce Transition Act of 1995 placed extreme benefit counseling and application processing workloads on the staff in the benefit programs department. In addition, VRS has assumed responsibility for administration of the retiree health insurance program. This has created a great deal of additional work for the benefit programs department, as VRS staff are called upon to act as intermediaries between retirees, the Department of Personnel and Training, and the health insurance carrier for resolution of eligibility issues, and claims and coverage disputes. Finally, various aspects–both major and minor–of the benefit structure are frequently revised through legislation. Timely implementation of legislated benefit modifications has created challenges throughout VRS, particularly in the benefit programs department, the field services department, and the information systems department.

Within the overall framework of its strategic planning process, VRS is examining strategies by which it can improve its operations through enhanced customer service and effective use of technology, while at the same time minimizing the number of required staff. Such strategies include expanding member access to information concerning VRS benefits and account balances; making internal VRS operating, processing, and financial systems more effective and efficient; and redesigning its organizational and operating structures to facilitate the delivery of improved customer service.

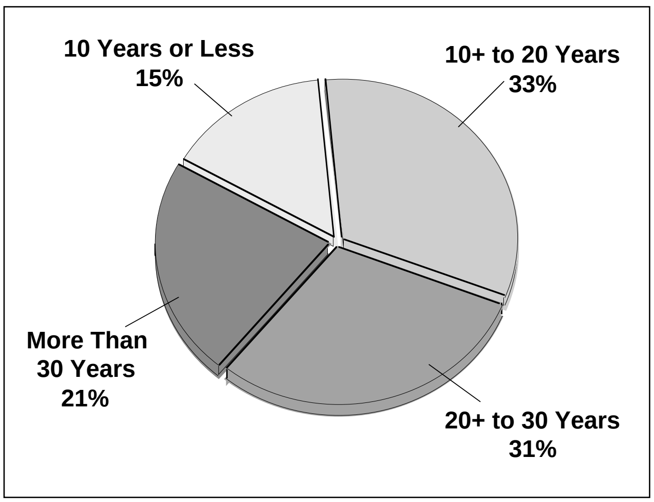
FY 1995 VRS Pension Expenses



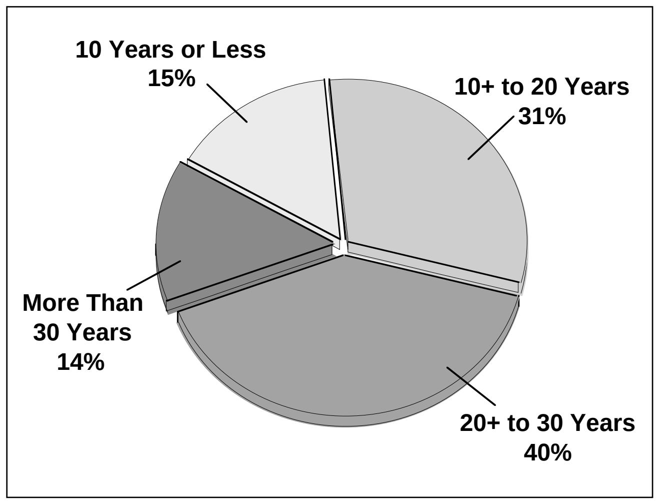
Distribution of Active Members



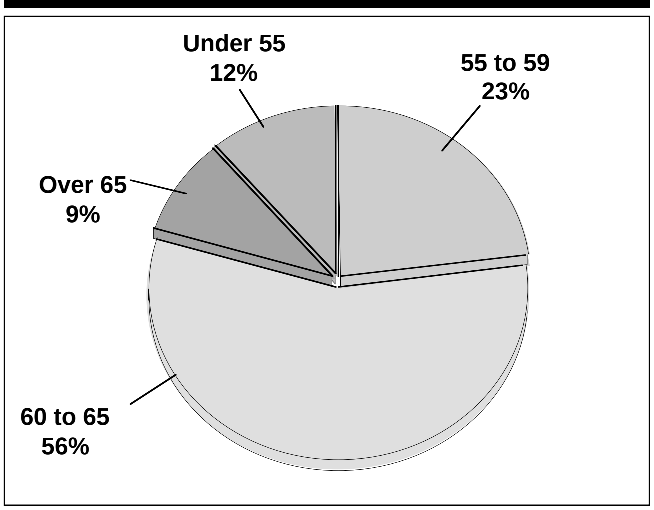
Years of Service at Retirement: All Retirees



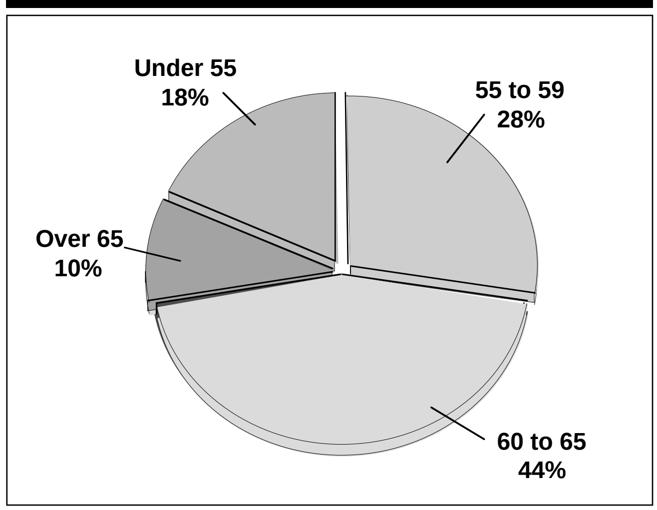
Years of Service at Retirement: FY 1995 Retirees



Age Distribution: All Retirees



Age Distribution: FY 1995 Retirees



Source: JLARC staff analysis of VRS annual report data. Data as of June 30, 1995.

Benefit Structure: Service Retirement

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/LEORS	JRS
Defined Benefit Formula	(Multiplier) X (Average Final Compensation) X (Years of Service) plus additional three percent of total benefit	(Multiplier) X (Average Final Compensation) X (Years of Service) optional: plus additional three percent of total benefit	(Multiplier) X (Average Final Compensation) X (Years of Service) plus additional three percent of total benefit	Same
Defined Benefit Multiplier	1.5 percent of first $13,200 AFC plus 1.65 percent of additional AFC; 1.65 percent of AFC for members with 35 years service	Same	Same	1.65 percent of AFC
Calculation of Average Final Compensation	Average of the highest 36 consecutive months of creditable compensation	Same	Same	Same
Service Credit Multiplier	None	None	None	3.5 for judges elected or appointed to an original term commencing prior to January 1, 1995; 2.5 for judges elected or appointed after that date
Annual Supplemental Benefit	None	None	$8,304 to age 65 (if retiree has 20 years of hazardous duty service)	None
Vesting	5 years	5 years	5 years	5 years

(continues)

Benefit Structure: Service Retirement (continued)

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/LEORS	JRS
Normal Retirement with Unreduced Benefit (Age/Years of Service	65/5 55/30 55/20 (agency heads who are involuntarily terminated)	65/5 Rule of 90 55/20 (city man-agers; county administrators, executives, and managers; town managers; and school superin-tendents who are involuntarily terminated) (optional) 55/30 (optional)	60/5 50/25 (optional for LEORS)	65/5 60/30
Early Retirement with Reduced Benefit (Age/Years of Service)*	55/5 50/10	Same	50/5 (optional for LEORS) 50/10	55/5
Early Retire-ment Benefit Reduction Factor				
Age 55 to 65 with less than 30 years service	0.5 percent for each month short of normal retirement for first 60 months, plus 0.4 percent for all additional months	Same	Same	Same
Age 50 to 55 with ten years service	Additional 0.6 percent for each month short of age 55*	Same	Same	Not Applicable
Mandatory Retirement Age	None	None	70 for SPORS (except for gubernatorial appointees or elected officials). Localities may impose a mandatory retirement age for LEORS based on bona fide occupational qualifications.	70 if appointed or reappointed after 7/1/93

(continues)

Benefit Structure: Service Retirement (continued)

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/LEORS	JRS
Maximum Compensation Used to Compute Benefits, and Maximum Benefit Amounts	Compensation used in computing benefits shall not exceed $235,840 (pre-January 1996 members) or $150,000 (post-January 1996 members). Benefit amounts adjusted accordingly. Benefit can not exceed lesser of 100 percent of average final compensation or $120,000	Same	Same	Same, in addition benefits shall not exceed 75 percent AFC
Refunds	Accumulated member contributions plus employer-paid member contributions made after 7/1/80, plus four percent interest	Same	Same	Same

* Early retirement benefits under the 50/10 provision are calculated as the greater of (1) retirement deferred to age 55 with the additional 0.6 percent monthly reduction factor or (2) the actuarially-determined present value of accumulated member contributions plus interest.

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Disability Retirement

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Vesting	None	None	None	None
Defined Benefit Multiplier	1.65 Percent of AFC	Same	Same	Same
Defined Benefit Formula - Regular Disability (if vested)	(Multiplier) X (AFC) X (Years of Service)	Same	Same	Same
Enhanced Service Credit	If less than age 60, service credit equals lesser of (1) twice amount of actual service or (2) actual service plus number of years to age 60	Same	Same	Same
Minimum Guaranteed Defined Benefit - Regular Disability (if not vested)	50 percent AFC (if not qualified for primary social security benefits) 33.3 percent AFC (if qualified for primary social security benefits)	Same	Same	Same
Work-Related Disability Defined Benefit Benefits offset by workers compen-sation award Accumulated member contributions and interest refunded to retiree	Higher of: Regular Disability Benefit Formula or, 50 percent AFC (if qualified for social security), or 66.6 percent AFC (if not qualified for social security)	Same	Same	Same
Presumption of Work-Related Disability from respiratory disease, heart disease and hypertension	No	No	Yes	No

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Purchase of Prior Service Credit for Service and Disability Retirement

Benefit Provision	VRS State/Teacher	VRS Political Sub-division	SPORS/ LEORS	JRS
Five Percent Purchase Rate Can be used to qualify for unreduced early retirement May be paid in a lump sum or by payroll deduction	Received refund after 7/1/42 On personal sick leave after 1/1/64 On maternity leave after 1/1/64 On educational leave or leave for temporary employment with General Assembly (maximum purchase of four years) Originally hired after age 60, excluded from VRS due to age, and individual paid member contribution during time period in question (Cost is five percent of salary during time period in question) Service as a full-time salaried teacher or instructional aid prior to 7/1/74 Active military service, service in the retirement system of another state, or both (Maximum purchase of three years -- provided individual is vested with at least 25 years service; optional for localities)	Same	Same	Same
15 Percent Purchase Rate Can not be used to qualify for unreduced early retirement Must be vested in VRS to purchase Service credit can't be used in the calculation of a retirement benefit for another plan Must be paid in a lump sum	Service in another public employee retirement system Federal Civil Service Active military service	Same	Same	Same
Service Credit Granted at No Cost to Member	Return to VRS covered position from military leave of absence within 12 months of honorable discharge Originally hired after age 60, excluded from VRS due to age, employer paid member contribution during period in question Vested member who, as a teacher, was required to take involuntary maternity leave prior to 7/1/74 and subsequently returned to service (Maximum two years credit) Full-time employees of the General Assembly who were previously employed by General Assembly on a temporary basis for at least one Session (maximum five years credit). Provision effective until 8/30/95. Cost paid by employer.	Same	Same	Same

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Benefit Payment Options

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Basic Defined Benefit (Service and disability retirement)	Retiree receives benefit based on benefit formula. Upon death, difference between accumulated member contributions plus 4 percent interest and total benefit payments paid in lump sum to designated beneficiary	Same	Same	Same
100 Percent Survivor (Service retirement only)	Retiree receives less than basic benefit. Upon death, contingent annuitant continues to receive same monthly benefit			
50 percent Survivor (Service and disability retirement)	Retiree receives less than basic benefit but more than 100 percent survivor benefit. Upon death, contingent annuitant continues to receive half of monthly benefit			
Leveling (Service retirement only)	Retiree receives more than basic benefit in early years of retirement and less (maximum 50 percent reduction) than the basic benefit in later years. Upon death, any difference between benefit payments and accumulated contributions plus interest are paid to beneficiary			

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Cost of Living Adjustment

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Amount	First 3 percent of consumer price index increase; Plus half of each consumer price index percentage increase from 3 percent to 7 percent; Maximum 5 percent cost of living adjustment;	Same	Same	Same
Eligibility	Start to receive on July 1 of second calendar year after retirement	Same	Same	Same

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Death While in Service

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Benefit Amount for:				
Non-Work Related Death After Age 65	Amount equal to 100 percent survivor option (or refund of contributions and four percent interest if beneficiary chooses)	Same	Same	Same
Non-Work Related Death Prior to Age 65	Amount equal to one-half of 50 percent survivor option (or refund of contributions and four percent interest if beneficiary chooses)	Same	Same	Same
Work-Related Death	33.3 percent AFC if beneficiary qualifies for social security survivor benefits, plus refund of member contributions and interest. 50 percent AFC if not qualified for social security, plus refund of member contributions and interest	Same	Same	Same
Authorized Payee for:				
Non-Work Related Death	All death-in-service benefits payable to designated beneficiary but only if designated beneficiary is a spouse, parent, or minor child. Otherwise, only a refund of member contributions plus interest is paid	Same	Same	Same
Work-Related Deth	Spouse, minor child or dependent parent (in that order of precedence)	Same	Same	Same

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Group Life Insurance

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Benefit Amount for:				
Natural Death	Annual salary rounded to next highest thousand and then doubled	Same	Same	Same
Accidental Death	Annual salary rounded to next highest thousand and then quadrupled	Same	Same	Same
Dismemberment (accidental loss of one limb or sight in one eye)	Annual salary rounded to next highest thousand	Same	Same	Same
Dismemberment (accidental loss of two or more limbs or sight in both eyes)	Annual salary rounded to next highest thousand and then doubled	Same	Same	Same
Conversion to Individual Life Insurance Policy	Within 31 days of termination of employment	Same	Same	Same
Coverage After Retirement	Natural death benefit amount decreases two percent each month until it reaches 25 percent of original amount (Reduction does not begin until age 65 for disability retirees) Accidental death and dismemberment coverage ceases at retirement	Same	Same	Same

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Optional Life Insurance Program

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Amount of Employee Coverage	One, two, three or four times annual salary, up to maximum of $500,000	Same	Same	Same
Amount of Family Coverage (Four options for spouse/child coverage. Available option depends on amount of employee coverage purchased)	.5 X employee salary (spouse) / $5,000 (child) 1 X employee salary (spouse) /$5,000 (child) 1.5 X employee salary (spouse) /$10,000 (child) 2 X employee salary (spouse) /$15,000 (child)	Same	Same	Same
Amount of Children Only Coverage	Maximum of $5,000, $10,000 or $15,000 (depending on amount of coverage purchased)	Same	Same	Same
Evidence of Insurability	Employee - no (for amounts up to $250,000 if enrolled within first 31 days of employment) Spouse - yes (for options two, three, and four) no (for option 1) if enrolled employee adds spouse coverage within 31 days ot marriage Children - yes, except for addition of first born or adopted child of previously enrolled employee	Same	Same	Same
Termination of Coverage for:				
Employee	Service retirement, termination of optional life plan or basic group life insurance coverage, or age 65 if retired for disability	Same	Same	Same
Spouse	Earliest of termination of employee's coverage, divorce from employee, or termination of optional life plan	Same	Same	Same
Children	Earliest of termination of employee's coverage or age 21 (25 if college student) unless disabled	Same	Same	Same
Premiums	Total premium paid by employee	Same	Same	Same

Note: Children's coverage is limited over the first two years of life, ranging from $2,000 to $6,000 depending on option selected. Coverage is not provided for children less than 15 days of age.

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Retiree Health Care Credit

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Eligibility	Retiree with 15 years credited service; Optional for local school boards until July 1, 1998	Optional	Retiree with 15 years credited service; Optional for LEORS	Retiree with 15 years credited service
Amount	*State Employees*: $2.50 per month for each year of service - $75 maximum *Teachers:* $1.50 per month for each year of service - $45 maximum *Local school boards* may elect to provide an additional $1.00 per month for each year of service -- $30 maximum (effective July 1, 1998)	Political subdivisions may elect to provide $1.50 per month for each year of service - $45 maximum	$2.50 per month for each year of service - $75 maximum	$2.50 per month for each year of service - $75 maximum

Note: Retirees from a full-time, salaried position with a State agency must enroll in the State's group health insurance plan within 31 days of retirement to be eligible to participate in the health credit program. Retirees must pay the full amount of the health insurance premium, minus the amount of any health care credit for which they are eligible. If the retiree is eligible for Medicare, Hospital Part A and Medical Part B must be secured. Health care credit cannot exceed premium amount.

An alternate health credit is payable to retirees of State agencies who are enrolled in a private health insurance plan. The credit is paid to the retiree on a reimbursement basis through a third-party administrator.

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Deferred Compensation

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Eligibility	State employees eligible Teachers ineligible	Ineligible	SPORS eligible LEORS ineligible	Eligible
Contributions	Annual maximum of 25 percent of salary or $7,500, whichever is less	Not Applicable	Same as State Employees	Same as State Employees
Distribution Options	Full withdrawal of account value Partial withdrawal of account value with remainder paid as systematic withdrawal or annuity Systematic withdrawal for either a fixed time period or a designated amount Life Annuity	Not Applicable	Same as State Employees	Same as State Employees

Source: JLARC staff analysis of VRS documents.

Benefit Structure : Optional Defined Contribution Retirement Program

Benefit Provision	VRS State/Teacher	VRS Political Subdivision	SPORS/ LEORS	JRS
Eligibility	Institutions of higher education, may establish their own retirement plans for employees engaged in the performance of teaching, administrative or research duties. Teaching hospitals affiliated with institutions of higher education other than the MCV Hospitals Authority or the UVA Medical Center may establish their own retirement plans for health care providers. Eligible employees may elect participation in either the institution's retirement plan or VRS. Medical College of Virginia Hospitals Authority may establish one or more retirement plans for its employees, and may make contributions to the plan. Employees currently in the optional retirement program may stay or join any new plan. Employees currently in VRS may remain or join any new plan. New employees can elect to join either VRS or any new plan. University of Virginia Medical Center may establish one or more retirement plans for its employees, and may make contributions to the plan. Employees currently in the optional retirement program may stay or join any new plan. Employees currently in VRS may remain, or join any new plan. New employees can elect to join either VRS or any new plan.	Not Eligible	Not Eligible	Not Eligible
Defined Contribution Made by:				
State	10.4 percent for employees of institutions of higher education. (Institution may provide supplement of up to 2.17 percent) Lesser of total required VRS employer contribution, or eight percent, for employees of teaching hospitals.	Not Applicable	Not Applicable	Not Applicable
MCV Hospitals Authority	8 percent, or the contribution required by the State if the employee were a member of VRS, whichever is less.			
UVA Medical Center	8 percent, but employees who transfer from optional retirement program to any new plan established by UVA Medical Center shall continue to receive their current defined contribution.			

Source: JLARC staff analysis of VRS documents.

Key VRS Benefit Provisions Selected by Political Subdivisions

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Accomack County	x		
Accomack County School Board	x		
Accomack/Northampton Plan		x	x
Albemarle Co Service Authority	x		
Albemarle County	x		
Albemarle County School Board	x		x
Alexandria City	x		x
Alexandria City School Board		x	x
Alexandria Red/Hous Authority		x	x
Alexandria Sanitation Authority	x		x
Alleghany County	x		x
Alleghany County School Board	x		x
Alleghany Highlands Comm SVCS		x	x
Amelia County	x		
Amelia County School Board	x		x
Amherst County	x		x
Amherst County School Board	x		x
Amherst County Service Authority	x		x
Anchor Commission	x		x
Appomattox County	x		x
Appomattox County School Board	x		
Appomattox Regional Library	x		x
Appomattox River Water Auth	x		x
Augusta County	x		x
Augusta County School Board	x		x
Augusta County Service Authority	x		x
Bath County	x		
Bath County School Board	x		x
Bedford City	x		x
Bedford County	x		
Bedford County Public Service Authority	x		x
Bedford County School Board	x		
Bedford Public Library		x	
Bedford Recreation Commission		x	
Blacksburg-Christiansburg-VPI Water Authority	x		x
Blacksburg-VPI Sanitation Authority	x		x
Bland County	x		x
Bland County School Board	x		x
Botetourt County	x		
Botetourt County School Board	x		x
Bristol City	x		x
Bristol City School Board	x		x
Bristol Red/Hous Authority	x		x
Brunswick County	x		x
Brunswick County School Board	x		x

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Buchanan County	x		
Buchanan County School Board	x		
Buckingham County	x		x
Buckingham County School Board	x		
Buena Vista City	x		
Buena Vista City School Board	x		
Campbell Co Utilities & SVCS	x		x
Campbell County	x		x
Campbell County School Board	x		x
Capital Regional Airport Commission	x		x
Caroline County	x		
Caroline County School Board	x		
Carroll County	x		x
Carroll County School Board	x		x
Central Rappahanock Regional Library	x		x
Central VA Comm SVCS Bd	x		
Central Virginia Regional Jail	x		x
Central Virginia Waste Management Authority	x		
Charles City County	x		
Charles City County School Board	x		
Charlotte County	x		x
Charlotte County School Board	x		x
Charlottesville City School Board	x		x
Charlottesville Red/Hous Auth	x		x
Chesapeake Bridge/Tunnel	x		x
Chesapeake City	x		x
Chesapeake City School Board	x		x
Chesapeake Red/Hous Auth	x		x
Chesterfield County	x		x
Chesterfield County Health Center Commission	x		x
Chesterfield County School Board	x		x
City of Manassas School Board	x		
City of Virginia Beach Erosion Commission		x	
Clarke County	x		x
Clarke County School Board	x		x
Clifton Forge City	x		x
Clifton Forge City School Board		x	
Coeburn-Norton-Wise-Reg. Water Treatment Auth.	x		
Colonial Heights City	x		x
Colonial Heights City School Board	x		x
Colonial Services Board	x		
Colonial Soil & Water Conservation District	x		
Covington City	x		x
Covington City School Board	x		x
Craig County	x		

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Craig County School Board	x		
Crater Juv Det Home Comm	x		
Culpeper County	x		x
Culpeper County School Board	x		
Cumberland County	x		
Cumberland County School Board	x		x
Cumberland Mountain Comm SVCS	x		
Cumberland Plateau Reg Housing	x		x
Danville City	x		
Danville City School Board	x		x
Danville Red/Hous Authority	x		
Danville-Pittsylvania Mental Health Services Board	x		x
Dickenson County	x		x
Dickenson County School Board	x		x
Dinwiddie County Water Authority	x		x
Dinwiddie County	x		x
Dinwiddie County School Board	x		x
District 19 MH\MR SVCS Bd	x		x
District Home - Waynesboro	x		
Dowell J Howard Voc Center	x		x
Eastern Shore Comm SVCS Board		x	x
Eastern Shore Economic Development Commission		x	
Eastern Shore Public Library	x		x
Emporia City	x		x
Essex County	x		x
Essex County School Board	x		x
Fairfax City	x		
Fairfax City School Board	x		x
Falls Church City		x	
Falls Church City School Board	x		x
Fauquier County Water & Sanitation Authority	x		
Fauquier County	x		x
Fauquier County School Board	x		x
Floyd County	x		x
Floyd County School Board	x		x
Fluvanna County	x		x
Fluvanna County School Board	x		x
Franklin City	x		x
Franklin City School Board	x		x
Franklin County	x		x
Franklin County School Board	x		x
Franklin Red/Hous Authority	x		
Frederick Co Sanitation Authority	x		
Frederick County	x		
Frederick County School Board	x		x
Fredericksburg City	x		x

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Fredericksburg City School Board	x		
Fredericksburg-Stafford Park	x		x
Galax City	x		
Galax City School Board		x	
Giles County	x		
Giles County School Board	x		
Gloucester County	x		
Gloucester County School Board	x		x
Goochland County	x		x
Goochland County School Board	x		x
Goochland Powhatan Comm SVCS	x		x
Grayson County	x		x
Grayson County School Board	x		
Greene County	x		x
Greene County School Board	x		x
Greensville County	x		x
Greensville County School Board	x		x
Greensville County Water and Sewer Authority	x		x
Greensville-Emporia Comm SVCS	x		x
Halifax County	x		
Halifax/South Boston School Board	x		x
Hampton City	x		x
Hampton City School Board	x		x
Hampton Newport News Community Services Board	x		
Hampton Red/Hous Authority	x		
Hampton Roads Planning District Commission	x		
Hampton Roads Sanitation District	x		x
Hanover County	x		x
Hanover County School Board	x		x
Harrisonburg/Rockingham Comm SVCS Bd	x		x
Harrisonburg\Rockingham Sewer Authority	x		x
Harrisonburg City	x		x
Harrisonburg City School Board	x		x
Henrico County	x		x
Henrico County School Board	x		x
Henry County	x		x
Henry County Public Service Authorty	x		x
Henry County School Board	x		x
Highland County	x		
Highland County School Board	x		
Highlands Juvenile Det Ctr		x	
Hopewell City	x		x
Hopewell City School Board		x	x
Hopewell Red/Hous Authority		x	x
Industrial Dev Auth of Henrico Co		x	

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Isle of Wight County	x		x
Isle of Wight County School Board	x		x
Isle of Wight Public Recreation		x	x
Jackson River Technical Ctr		x	x
James City County	x		
James City Service Authority	x		
Jones Memorial Library	x		x
JT Comm Control South Boston	x		x
Kempsville-Bayside Mosquito Control Commission			
King & Queen County	x		x
King & Queen County School Board	x		
King George County	x		
King George County School Board	x		x
King William County	x		x
King William County School Board	x		
Lancaster County	x		x
Lancaster County School Board	x		x
Lee Co Red/Housing Authority	x		x
Lee County	x		x
Lenwisco Planning Dist Comm	x		x
Lexington City	x		
Lexington City School Board	x		
Lonesome Pine Regional Library	x		
Loudoun County	x		x
Loudoun County Sanitation Authority	x		x
Loudoun County School Board	x		x
Louisa County	x		x
Louisa County School Board	x		x
Lunenburg County	x		x
Lunenburg County School Board	x		x
Lynchburg City	x		x
Lynchburg City School Board	x		x
Madison County	x		
Madison County School Board	x		x
Manassas City	x		x
Manassas Park City	x		x
Manassas Park City School Board	x		
Martinsville City	x		
Martinsville City School Board	x		x
Mathews County		x	x
Mathews County School Board	x		x
Mecklenburg County	x		x
Mecklenburg County School Board	x		x
Meherrin Regional Library	x		
Middle Pen\No Neck Comm SVCS	x		

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Middle Peninsula Reg Security	x		
Middlesex County		x	
Middlesex County School Board	x		
Moccasin Gap Sanitation District	x		
Monacan Soil and Water Conservation District	x		x
Montgomery County	x		x
Montgomery County School Board	x		x
Mt. Rogers Planning District Commission			
Natural Tunnel Soil & Water Conservation District	x		x
Nelson County	x		x
Nelson County School Board	x		x
Nelson County Service Authority	x		
New Horizons Technical Center	x		x
New Kent County		x	x
New Kent County School Board		x	
New River Resource Authority	x		x
New River Valley Juv Det Comm	x		x
New River Valley Planning District		x	
Norfolk Airport Authority	x		x
Norfolk City		x	
Norfolk City School Board	x		x
Norfolk Red\Hous Authority	x		x
Northampton County	x		
Northampton County School Board	x		
Northern Neck Essex Co Home	x		x
Northern Neck Planning District Commission	x		x
Northern Neck Regional Jail	x		
Northern Neck Regional Vocational Center	x		
Northern VA Juv Det Home	x		x
Northern Virginia Health Care Center		x	
Northumberland County	x		x
Northumberland County School Board	x		x
Northwestern Comm SVCS Bd	x		x
Norton City	x		x
Norton City School Board	x		x
Nottoway County		x	
Nottoway County School Board	x		x
Orange County	x		x
Orange County County School Board	x		x
P D Pruden Vo-Tech Center		x	
Page County	x		x
Page County County School Board		x	x
Patrick County	x		x
Patrick County County School Board	x		x
Peninsula Ports Authority of VA	x		

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Pepper's Ferry Reg Wastewater	x		x
Petersburg City	x		
Petersburg City School Board	x		
Petersburg Redevelopment and Housing Authority	x		x
Piedmont Planning District Commission	x		
Piedmont Regional Jail	x		
Pittsylvania Co SVC Authority		x	
Pittsylvania County	x		
Pittsylvania County School Board	x		x
Planning District Commission SVCS Board		x	
Poquoson City	x		x
Poquoson City School Board	x		x
Portsmouth City		x	
Portsmouth City School Board	x		
Portsmouth Red/Hous Authority	x		
Potomac River Fisheries Comm	x		x
Powhatan County School Board	x		x
Prince Edward County	x		
Prince Edward County School Board	x		
Prince George County	x		x
Prince George County School Board	x		x
Prince William County	x		x
Prince William County School Board	x		x
Pulaski County	x		x
Pulaski County School Board	x		x
Radford City	x		x
Radford City School Board	x		x
Rappahannock Area Comm SVCS	x		
Rappahannock County	x		x
Rappahannock County School Board	x		x
Rappahannock Juvenile Center	x		x
Rappahannock Security Center	x		
Reg Cont Bd/Culpeper Madison	x		
Region Ten Community SVCS Bd	x		x
Richmond City		x	
Richmond City School Board	x		x
Richmond County	x		x
Rappahannock Rapidan Comm SVCS	x		
Rappahannock Rapidan Planning District Commission		x	
Richmond County School Board	x		
Richmond Metropolitan Authority	x		x
Richmond Petersburg Turnpike Authority		x	
Richmond Red/Hous Authority	x		
Richmond Regional Planning Commission		x	
Rivanna Solid Waste Authority	x		

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Rivanna Water & Sewer Authority	x		
Roanoke City		x	
Roanoke City School Board		x	
Roanoke County	x		x
Roanoke County Public Service Authority		x	
Roanoke County School Board	x		x
Robert E. Lee Soil and Water Conservation District	x		
Rockbridge Area Comm SVC Bd	x		
Rockbridge Area Social Service Dept	x		
Rockbridge Co Public SVC Authority	x		
Rockbridge County	x		
Rockbridge County School Board	x		x
Rockbridge Regional Library	x		
Rockingham County	x		x
Rockingham County School Board	x		x
Russell County	x		x
Russell County School Board	x		x
Salem City	x		
Salem City School Board	x		x
Scott County	x		x
Scott County Redevelopment & Housing Authority	x		x
Scott County School Board	x		x
Shenandoah County	x		x
Shenandoah County School Board	x		x
Shenandoah Valley Juvenile Detention Home Commission	x		x
Smyth Co Public Service Authority	x		
Smyth County	x		x
Smyth County School Board	x		x
South Boston City	x		x
South Boston City School Board	x		x
Southampton County	x		x
Southampton County School Board	x		x
Southeastern Public SVC Authority	x		
Southeastern VA Job Training		x	x
Southside Planning Dist Comm	x		x
Southside Reg Juvenile Home	x		
Southside Regional Library Board	x		x
Spotsylvania County	x		x
Spotsylvania County School Board	x		x
Spotsylvania-Stafford-Fredericksburg Group Home Co	x		
Stafford County	x		x
Stafford County School Board	x		x
State Education Assistance Authority	x		x
Staunton City	x		x
Staunton City School Board	x		x

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Staunton Red/Hous Authority	x		
Suffolk City	x		x
Suffolk City School Board	x		x
Suffolk Redev & Housing Authority		x	
Surry County	x		
Surry County School Board	x		
Surry County Public Schools			
Sussex County	x		x
Sussex County School Board	x		
Tazewell County	x		
Tazewell County School Board	x		
Tazewell Park Area Recreation	x		
The Handley Library	x		x
The Peninsula Airport Commission	x		x
Thomas Jefferson Planning District Commission	x		x
Thomas Jefferson Soil & Water Conservation Dist.	x		
Tidewater Regional Group Home Commission	x		
Tidewater Transportation District	x		x
Town of Abingdon		x	x
Town of Alberta		x	
Town of Altavista	x		
Town of Amherst	x		x
Town of Appomattox	x		x
Town of Ashland	x		
Town of Berryville		x	
Town of Big Stone Gap	x		
Town of Blacksburg	x		x
Town of Blackstone	x		x
Town of Bluefield	x		x
Town of Bowling Green		x	x
Town of Boyce	x		
Town of Boydton	x		
Town of Bridgewater	x		
Town of Broadway	x		
Town of Brookneal	x		
Town of Cape Charles	x		
Town of Chase City	x		x
Town of Chatham	x		
Town of Chilhowie	x		
Town of Chincoteague	x		
Town of Christiansburg	x		x
Town of Clarksville	x		x
Town of Coeburn	x		
Town of Colonial Beach	x		x
Town of Courtland		x	
Town of Craigsville	x		
Town of Crewe	x		

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Town of Culpeper	x		
Town of Damascus		x	
Town of Dayton		x	x
Town of Dublin	x		
Town of Dumfries		x	
Town of Edinburg		x	
Town of Elkton	x		x
Town of Front Royal	x		
Town of Gate City	x		
Town of Glasgow	x		x
Town of Gretna	x		
Town of Halifax		x	
Town of Hamilton	x		x
Town of Herndon	x		
Town of Hillsville		x	
Town of Hurt	x		
Town of Grundy	x		
Town of Independence		x	
Town of Lawrenceville	x		x
Town of Leesburg	x		x
Town of Louisa	x		x
Town of Luray	x		x
Town of Marion	x		x
Town of McKenney	x	x	
Town of Middleburg	x		
Town of Middletown	x		x
Town of Iron Gate		x	
Town of Jarratt		x	
Town of Jonesville	x		
Town of Kenbridge	x		x
Town of Kilmarnock	x		
Town of Montross	x		x
Town of Mt. Jackson		x	
Town of Narrows	x		
Town of New Market	x		x
Town of Onancock	x		
Town of Orange	x		
Town of Parksley	x		
Town of Pearisburg	x		
Town of Pembroke	x		
Town of Pulaski	x		x
Town of Purcellville	x		
Town of Quantico	x		x
Town of Remington		x	
Town of Rocky Mount	x		x

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Town of Round Hill	x		
Town of Saltville	x		x
Town of Shenandoah		x	x
Town of Smithfield	x		
Town of St. Paul	x		
Town of Stanley	x		
Town of Strasburg		x	x
Town of Stuart		x	
Town of Tappahannock		x	
Town of Tazewell		x	
Town of Timberville	x		
Town of Urbanna		x	
Town of Victoria	x		
Town of Vienna	x		x
Town of Vinton	x		
Town of Wakefield	x		x
Town of Warrenton	x		
Town of Warsaw	x		x
Town of Waverly		x	
Town of Weber City	x		x
Town of Wise	x		
Town of Woodstock	x		
Town of Wytheville	x		x
Tri-County/City Soil and Water Conservation Dist.	x		x
Upper Occoquan Sewage Auth	x		x
Upper Valley Regional Park Authority		x	
VA Beach/Lynnhaven Mosquito			
VA Coalfield Economic Dev Authority	x		x
VA Small Business Financing Authority		x	
Valley Community Services Board		x	
Valley Vo-Tech Center	x		
Virginia Beach City	x		x
Virginia Beach City School Board	x		x
Virginia Beach City Erosion Commission			
Warwick County		x	
Washington County	x		x
Washington County School Board	x		x
Washington County Service Authority	x		x
Waynesboro City	x		x
Waynesboro City School Board	x		x
Waynesboro Red/Hous Authority	x		x
Western Tidewater Comm SVCS	x		x
Western Tidewater Regional Jail	x		x
Virginia Education Loan Authority	x		x
Virginia Highlands Airport Commission	x		x

(continues)

Key VRS Benefit Provisions Selected by Political Subdivisions (continued)

Political Subdivision	Age 55 and 30 Years Service	Rule of 90	Provides Additional Three Percent
Virginia Peninsulas Public Service Authority	x		x
Warren County	x		
Warren County School Board	x		
Westmoreland County	x		x
Westmoreland County School Board	x		x
Williamsburg City	x		x
Williamsburg City-James City County School Board	x		x
Winchester City	x		x
Winchester City School Board	x		x
Wise County	x		x
Wise County School Board	x		x
Wythe County	x		
Wythe County School Board		x	x
Wythe-Grayson Regional Library	x		
Wytheville Red\Hous Authority	x		
York County	x		x
York County School Board	x		x

Source: Virginia Retirement System.

LEORS Coverage Among Political Subdivisions

Employer	Covered Employee Groups and Date (MM-YY) Coverage Began (x = no coverage)			Age/Service for Unreduced Benefit		Member Contribution Method*
	Police	Fire	Sheriff	50/25	55/30	
Accomack County	x	x	07-90	✔		1
Albemarle County	10-76	x	07-90	✔		1
Alleghany County	x	x	07-90	✔		2
Amelia County	x	x	07-90	✔		1
Amherst County	x	x	07-90	✔		1
Appomattox County	10-85	x	07-90	✔		1
Augusta County	07-79	07-79	07-90	✔		1
Bath County	x	x	07-90	✔		1
Bedford County	07-87	x	07-90	✔		1
Bland County	x	x	07-90	✔		3
Botetourt County	x	x	07-90	✔		1
Brunswick County	x	x	07-90	✔		3
Buchanan County	x	x	07-90	✔		3
Buckingham County	x	x	07-90	✔		3
Campbell County	03-71	x	07-90	✔		1
Caroline County	x	x	07-90	✔		1
Carroll County	x	x	07-90	✔		2
Charles City County	x	x	07-90	✔		3
Charlotte County	x	x	07-90	✔		1
Chesterfield County	09-74	09-75	07-90	✔		1
City of Alexandria	x	x	07-90	✔		1
City of Bedford	01-79	x	07-90	✔		1
City of Bristol	01-82	07-87	07-90	✔		1
City of Buena Vista	07-90	x	07-90	✔		1
City of Chesapeake	10-74	10-74	07-90	✔		1
City of Colonial Heights	11-74	x	07-90	✔		1
City of Danville	07-81	x	07-90		✔	1
City of Emporia	07-90	x	07-90	✔		1
City of Falls Church	x	x	07-90	✔		2
City of Franklin	01-72	07-83	07-90	✔		1
City of Fredericksburg	07-74	07-74	07-90	✔		1
City of Galax	07-90	x	07-90	✔		3
City of Hampton	04-75	04-75	07-90	✔		1
City of Harrisonburg	12-90	12-90	07-90	✔		1
City of Hopewell	04-78	04-78	07-90	✔		1
City of Lexington	07-92	x	07-90	✔		1
City of Lynchburg	01-75	01-75	07-90	✔		1
City of Manassas	07-76	01-76	07-90	✔		1
City of Martinsville	04-72	07-87	07-90	✔		1
City of Norton	x	x	07-90	✔		1

* KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after tax basis.

LEORS Coverage Among Political Subdivisions (continued)

Employer	Covered Employee Groups and Date (MM-YY) Coverage Began (x = no coverage)			Age/Service for Unreduced Benefit		Member Contribution Method*
	Police	Fire	Sheriff	50/25	55/30	
City of Petersburg	01-76	01-76	07-90	✔		1
City of Poquoson	07-75	07-75	07-90		✔	1
City of Portsmouth	x	x	07-90	✔		1
City of Radford	02-71	02-71	07-90		✔	1
City of Richmond	x	x	07-90	✔		3
City of Roanoke	07-84	x	07-90	✔		1
City of Salem	09-71	07-74	07-90	✔		1
City of Staunton	07-81	07-81	07-90	✔		1
City of Suffolk	01-77	01-77	07-90	✔		1
City of Virginia Beach	01-77	10-74	07-90	✔		1
City of Waynesboro	01-78	01-78	07-90	✔		1
City of Williamsburg	01-79	01-79	07-90	✔		1
City of Winchester	07-75	07-75	07-90	✔		1
Clarke County	x	x	07-90	✔		1
Craig County	x	x	07-90	✔		3
Culpeper County	07-90	x	07-90	✔		1
Cumberland County	x	x	07-90	✔		3
Dickenson County	x	x	07-90	✔		3
Dinwiddie County	x	x	07-90	✔		1
Essex County	10-70	x	07-90	✔		1
Fauquier County	08-90	x	07-90	✔		1
Floyd County	x	x	07-90	✔		1
Fluvanna County	x	x	07-90	✔		1
Franklin County	07-88	x	07-90		✔	3
Frederick County	x	x	07-90	✔		1
Giles County	07-90	x	07-90	✔		3
Gloucester County	x	x	07-90	✔		1
Goochland County	06-84	x	07-90	✔		1
Grayson County	x	x	07-90	✔		3
Greene County	x	x	07-90	✔		3
Greensville County	07-90	x	07-90	✔		1
Halifax County	x	x	07-90	✔		3
Hanover County	07-85	x	07-90	✔		1
Henrico County	07-75	07-75	07-90	✔		1
Henry County	01-77	x	07-90	✔		1
Highland County	x	x	07-90	✔		3
Isle of Wight County	x	x	07-90	✔		1
James City County	x	x	07-90	✔		1
King & Queen County	x	x	07-90	✔		1
King George County	x	x	07-90	✔		1

* KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after tax basis.

LEORS Coverage Among Political Subdivisions (continued)

Employer	Covered Employee Groups and Date (MM-YY) Coverage Began (x = no coverage)			Age/Service for Unreduced Benefit		Member Contribution
	Police	Fire	Sheriff	50/25	55/30	Method*
King William County	x	x	07-90	✔		3
Lancaster County	x	x	07-90	✔		1
Lee County	x	x	07-90	✔		3
Loudoun County	07-76	x	07-90	✔		1
Louisa County	07-93	x	07-90	✔		2
Lunenburg County	x	x	07-90	✔		3
Madison County	x	x	07-90	✔		3
Mathews County	x	x	07-90	✔		1
Mecklenburg County	07-83	x	07-90	✔		1
Middlesex County	x	x	07-90	✔		1
Montgomery County	x	x	07-90	✔		1
Nelson County	x	x	07-90	✔		1
New Kent County	x	x	07-90	✔		1
Norfolk Airport Authority	x	07-92		✔		1
Northampton County	x	x	07-90	✔		3
Northumberland County	x	x	07-90	✔		3
Nottoway County	x	x	07-90	✔		1
Orange County	x	x	07-90	✔		1
Page County	x	x	07-90	✔		1
Patrick County	x	x	07-90	✔		3
Pittsylvania County	07-87	x	07-90	✔		3
Prince Edward County	x	x	07-90	✔		1
Prince George County	x	x	07-90	✔		1
Prince William County	01-71	07-84	07-90	✔		1
Pulaski County	07-82	x	07-90	✔		1
Rappahannock County	x	x	07-90	✔		1
Richmond County	x	x	07-90	✔		3
Roanoke County	03-79	03-79	07-90	✔		1
Rockbridge County	x	x	07-90	✔		1
Rockingham County	07-92	07-92	07-90	✔		1
Russell County	x	x	07-90	✔		2
Scott County	x	x	07-90	✔		1
Shenandoah County	x	x	07-90	✔		1
Smyth County	x	x	07-90	✔		3
Southampton County	x	x	07-90	✔		1
Spotsylvania County	x	x	07-90	✔		1
Stafford County	x	x	07-90	✔		1
Surry County	x	x	07-90	✔		1
Sussex County	x	x	07-90	✔		1
Tazewell County	x	x	07-90	✔		1

* KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after tax basis.

LEORS Coverage Among Political Subdivisions (continued)

Employer	Covered Employee Groups and Date (MM-YY) Coverage Began (x = no coverage)			Age/Service for Unreduced Benefit		Member Contribution Method*
	Police	Fire	Sheriff	50/25	55/30	
Town of Altavista	04-74	x		✔		1
Town of Amherst	04-91	x		✔		1
Town of Big Stone Gap	01-85	x			✔	3
Town of Blacksburg	07-79	x		✔		1
Town of Bridgewater	01-92	x		✔		1
Town of Chatham	09-84	x		✔		1
Town of Colonial Beach	07-90	x		✔		1
Town of Culpeper	10-71	x		✔		1
Town of Elkton	07-93	x		✔		3
Town of Front Royal	07-90	07-90		✔		1
Town of Herndon	07-91	x		✔		1
Town of Hurt	07-76	x		✔		1
Town of Luray	09-79	x			✔	3
Town of Narrows	04-72	x		✔		1
Town of Pearisburg	02-73	x			✔	3
Town of Rocky Mount	07-91	x		✔		1
Town of Vienna	05-75	x		✔		1
Town of Vinton	10-71	x		✔		1
Town of Warrenton	04-78	x		✔		1
Warren County	x	x	07-90	✔		1
Washington County	x	x	07-90	✔		1
Westmoreland County	x	x	07-90	✔		2
Wise County	x	x	07-90	✔		1
Wythe County	x	x	07-90	✔		1
York County	01-76	01-76	07-90		✔	1

* KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after tax basis.

Source: Virginia Retirement System.

Employer Payment of VRS Member Contributions

Employer	Member Contribution Method*
Alexandria City School Board	2
Alexandria Red/House Authority	3
Alleghany County	2
Alleghany County School Board	2
Arlington County School Board	2
Bland County	3
Brunswick County	3
Brunswick County School Board	3
Buchanan County	3
Buckingham County	3
Bureau of Correctional Field Units	3
Cape Charles Town School Board	3
Carroll County	2
Charles City County	3
Clifton Forge City	3
Clifton Forge City School Board	3
Craig County	3
Cumberland County	3
Cumberland Plateau Regional Housing	3
Dickenson County	3
Fairfax County School Board	2
Falls Church City	2
Falls Church City School Board	2
Fire Commission	3
Former Private School Employees	3
Franklin County	3
Galax City	3
Galax City School Board	2
Giles County	3
Grayson County	3
Grayson County School Board	2
Greene County	3
Halifax County	3
Highland County	3
Highland County School Board	3
Independence Bicentennial Commission	3
Jones Memorial Library	3

*KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after-tax basis.

(continues)

Employer Payment of VRS Member Contributions (continued)

Employer	Member Contribution Method*
King William County	3
Lee County	3
Lexington High School	2
Louisa County	2
Louisa County School Board	2
Lunenburg County	3
Madison County	3
Middle Peninsula Regional Security	3
Mt. Rogers Planning District Commission	3
Natural Tunnel Soil & Water Conservation District	3
New River Valley Planning District	3
Northampton County	3
Northampton County School Board	2
Northern Neck Essex County Home	3
Northern Neck Regional Jail	3
Northern Virginia Health Care Center	2
Northumberland County	3
Orange County School Board	2
Patrick County	3
Peninsula Ports Authority of Virginia	3
Pittsylvania County	3
Pittsylvania County SVC Authority	3
Region Ten Community SVCS Board	2
Reimbursement & Community Accounting	3
Richmond City	3
Richmond County	3
Richmond County School Board	3
Roanoke County Public Service Authority	3
Russell County	2
Smyth County Public Service Authority	3
Smyth County	3
Tidewater Regional Group Home Commission	2
Town of Big Stone Gap	3
Town of Bluefield	3
Town of Boyce	3
Town of Boydton	3
Town of Cape Charles	3

*KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after-tax basis.

(continues)

Employer Payment of VRS Member Contributions (continued)

Employer	Member Contribution Method*
Town of Chase City	3
Town of Chincoteague	3
Town of Coeburn	3
Town of Craigsville	2
Town of Damascus	3
Town of Dublin	3
Town of Edinburg	3
Town of Elkton	3
Town of Gate City	3
Town of Glasgow	3
Town of Gretna	3
Town of Grundy	3
Town of Halifax	3
Town of Iron Gate	3
Town of Jarratt	3
Town of Jonesville	3
Town of Kenbridge	3
Town of Kilmarnock	3
Town of Lawrenceville	3
Town of Luray	3
Town of Marion	3
Town of Middletown	3
Town of Pearisburg	3
Town of Pulaski	3
Town of Quantico	3
Town of Remington	3
Town of Shenandoah	3
Town of St. Paul	3
Town of Stuart	3
Town of Urbanna	3
Town of Victoria	3
Town of Wakefield	3
Tri-County/City Soil and Water Conservation District	3
Westmoreland County	2
Westmoreland County School Board	2
Wythe-Grayson Regional Library	3
All State Employees, and all other political subdivisions	1

*KEY: 1 = Employer pays five percent contribution for member; 2 = Member pays five percent contribution on before-tax basis; 3 = Member pays five percent contribution on after-tax basis.

Source: Virginia Retirement System.

Comparative Data on Selected State Employee Retirement Systems

State	Multiplier	Employee Contribution Rate (Percent of Payroll)	Final Average Compensation (FAC) Period (Months)	FAC Period Conditions	Vestiing Period (Years)	Retirement Age with 5 Years Service	Retirement Age with 30 Years Service
California	1.25	7	12	Consecutive	10	n/a	65
Delaware	1.67	3	60	Non-Consecutive	5	62	any
Georgia	1.64	6	24	Consecutive	10	n/a	any
Illinois	1.1	4	48	Highest out of last 120 months, non consecutive	8	n/a	60
Indiana	1.1	3	60	Non-Consecutive	10	n/a	60
Mississippi	1.875	7.25	48	Non-Consecutive	4	60	any
Montana	1.78	6.7	36	Consecutive	5	60	any
North Dakota	1.74	4	36	Non-Consecutive	5	65	53
New Mexico	2.5	6.18	36	Consecutive	5	65	any
New York	1.66	3	36	Consecutive	10	n/a	62
Oklahoma	2	2	36	Highest out of last 120 months, non consecutive	8	n/a	62
Oregon	1.67	6	36	Consecutive	5	58	any
South Dakota	1.3	5	36	Highest out of last 120 months, non consecutive	5	65	55
Tennessee	1.5	5	60	Consecutive	5	60	any
Texas	2	6	36	Non-Consecutive	5	60	50
Utah	2	6	60	Non-Consecutive	4	65	any
Virginia	**1.5/1.65***	**5**	**36**	**Consecutive**	**5**	**65**	**55**
Wisconsin	1.6	6.2	36	Non-Consecutive	5	65	57
Average	**1.67**	**5.07**	**40.66**	**n/a**	**6.3**	**62 - n/a**	**58/any**

Notes: All of the states in this analysis pay at least a portion of the required member contribution, and also provide social security coverage for their employees. Virginia pays 100 percent of the required member contribution.

*Virginia's multiplier is 1.5 percent of the first $13,200 of AFC, and 1.65 percent of the remainder of AFC.

Source: JLARC staff analysis of data contained in FY 1994 state retirement system annual reports, 1994 PENDAT database prepared by Public Pension Coordinating Council, and the 1994 Comparative Study of Major Public Pension Plans prepared by the Wisconsin Retirement Research Committee.

State Employee Retirement Systems Using More Than One Benefit Mutiplier

State	Benefit Multipliers
Alaska:	2 percent FAC* for first 20 years, 2 percent next ten years, 2.5 percent all additional years
Arkansas	1.872 percent (contributory plan); 1.555 percent + 0.322 percent until age 62 (non-contributory plan)
Colorado:	2.5 percent FAC for first 20 years, 1.5 percent for next ten years
Connecticut:	1.33 percent FAC + 0.5 percent FAC over $18,000
Illinois:	1 percent FAC first ten years, 1.1 percent next ten years, 1.3 percent next ten years, 1.5 percent all additional years
Indiana:	1.1 percent FAC + employee financed money purchase annuity
Louisiana:	2 percent FAC first 20 years, 2.5 percent next ten years
Maryland:	0.8 percent of first $20,600 FAC + 1.5 percent of excess FAC; 1.8 percent for all members hired prior to January 1, 1980
Minnesota	1 percent first ten years, 1.5 percent all additional years (with subsidized early retirement benefit adjustment); or 1.5 percent with actuarially reduced early retirement benefit
Mississippi:	1.875 percent FAC first 20 years, 2 percent all additional years
Montana	Higher of 1.78 percent or twice the amount of the members accumulated contributions
New Mexico	2.5 percent or 3 percent, depending on coverage plan selected
New York:	0.71 to 2 percent for contributory plans depending on membership tier and length of service 2 percent first 25 years, 1.66 percent all additional years for non-contributory plans
Rhode Island	1.7 percent FAC first ten years, 1.9 percent next ten years, 3.0 percent next ten years
Tennessee	1.5 percent + 0.25 percent of FAC over $25,000
Utah	2 percent (non-contributory plan); 1.1 percent (years prior to 1967) + 1.25 percent (1967-1975) + 2 percent (1975 - present) (contributory plan)
Virginia:	**1.5 percent first $13,200 FAC + 1.65 percent excess FAC + additional three percent of computed benefit**

*Note: FAC is an abbreviation for final average compensation.

Source: JLARC staff analysis of data contained in FY 1994 state retirement system annual reports, 1994 PENDAT database prepared by Public Pension Coordinating Council, and the 1994 Comparative Study of Major Public Pension Plans prepared by the Wisconsin Retirement Research Committee.

Comparison of Employee Contribution Rates of State Employee Retirement Systems

Social Security/ Multiplier	Number of States	Average Rate (Percent of Payroll)	Rate Range (Percent of Payroll)
Social Security Coverage, Multiplier Greater than or Equal to 1.65	25	5.18	2 - 8.73
Social Security Coverage, Multiplier Less than 1.65	10	4.80	2.75 - 7
No Social Security Coverage	7	7.92	6.75 - 9.31

Notes:

Seven states which do not require employee contributions are not included in this analysis.

The 3.6 percent employee contribution required by Nebraska's defined contribution plan is not included in this analysis.

Source: JLARC staff analysis of data contained in FY 1994 state retirement system annual reports, 1994 PENDAT database prepared by Public Pension Coordinating Council, and the 1994 Comparative Study of Major Public Pension Plans prepared by the Wisconsin Retirement Research Committee.

Major Milestones in Development of the VRS Benefit Structure

Year	Event
1908	Retired Teachers Fund created
1942	Virginia Retirement System (VRS) and Judicial Retirement System (JRS) created
1944	Political subdivisions allowed to join VRS
1950	State Police Officers Retirement System (SPORS) created
1952	VRS repealed, and re-enacted as Virginia Supplemental Retirement System (VSRS), in order to obtain social security coverage for public employees
1955	SPORS covered under social security
1956	JRS covered under social security
1960	Group life insurance program created
1962	Group life insurance program made compulsory for all full-time salaried State employees
1970	Cost of Living Adjustment (COLA) established, in amount equal to full increase in consumer price index
1970	Political subdivisions authorized to provide SPORS-equivalent benefits to law enforcement personnel
1974	Statutory five percent member contribution rate established
1974	Deferred compensation program authorized
1978	COLA capped at a five percent maximum
1980	Deferred compensation program implemented
1983	State begins to pay member pension contribution
1984	State begins to pay member group life contribution
1987	Minimum age and service requirements for full retirement benefits reduced from 60/30 to 55/30 for State employees, teachers and judges (optional for political subdivisions)
1987	Mandatory retirement age repealed for State employees, teachers, political subdivisions, and judges
1989	State retiree health care credit established
1990	VSRS repealed and reenacted as VRS, in response to federal legislation prohibiting integration of social security and retirement benefits
	Benefit formulas for service and disability retirement assumed current form
	Minimum age and service requirements for full retirement benefits reduced from 55/30 to 50/25 for State Police (optional for political subdivisions providing LEORS)
1990 - 96	Expansion of opportunities to purchase or receive prior service credit
1991	Early Retirement Incentive program
1991	State contribution rates established for optional retirement program for higher education.
1992	State retiree health care credit increased
	Political subdivisions and local school boards authorized to provide retiree health care credit
	Mandatory retirement at age 70 reinstated for judges
1994	VRS benefits increased by three percent for State employees. (Optional for political subdivisions)
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)

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

Major Studies of VRS Benefit Issues, 1985 to Present

Benefit Issue/(*Study*)	Key Findings/Recommendations
Efficacy of Establishing and Administering a Group Health Insurance Plan for Retired State Employees, Teachers and Political Subdivision Employees *(Department of Personnel and Training - in progress)*	In progress
Funding and Structure of Cost of Living Adjustment *(JLARC - 1995)*	Completed
Benefit Multiplier and Pension Benefit Levels *(JLARC - 1995)*	Completed
Feasibility and Cost of Extending SPORS Benefits to Other State Law Enforcement Officers *(State Crime Commission - 1995)*	Other classes of law enforcement officers are largely deserving of retirement benefits equivalent to SPORS. However, distinctions can be made between the duties, hazards, and risks faced by officers employed by State agencies. Implementation of SPORS-equivalent benefits may have to be incremental due to funding concerns.
Structure of State Disability Program *(State Employee Benefits Assessment - Joint Commission Studying the Management of the Commonwealth's Workforce - 1994)*	Restructure long term disability insurance coverage so that the program is separate from VRS retirement and integrated with a short term disability plan
Administration of VRS Disability Retirement Program (*JLARC - 1994*)	Differing statutory interpretations and a frequent lack of objective medical evidence creates potential for inconsistency or error in initial disability determination and subsequent appeals In 1992, 9.4 percent of disability retirees had earned income VRS Board should consider development of regulations for program administration
Use of Defined Contribution Retirement Plan *(State Employee Benefits Assessment - Joint Commission Studying the Management of the Commonwealth's Workforce - 1994)*	A defined contribution plan presents an opportunity for enhancing existing VRS benefits. Defined contribution plans are simple to administer and are portable for employees. However, such plans may also result in low investment earnings and insufficient retirement assets due to an individual's aversion to long-term investment risk
Optional, Employee-Paid Life Insurance *(State Employee Benefits Assessment - Joint Commission Studying the Management of the Commonwealth's Workforce - 1994)*	Opportunities to purchase additional life insurance coverage should be increased

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Major Studies of VRS Benefit Issues, 1985 to Present (continued)

Benefit Issue/(*Study*)	Key Findings/Recommendations
Portability of VRS Pension Benefits Between the State and its Political Subdivisions *(VRS/Association of Municipal Retirement Systems - 1994)*	There is complete portability of retirement benefits and 100 percent income preservation for VRS members employed by the 853 State agencies and political subdivisions participating in VRS. Legislation needed to permit portability of benefits between VRS employers and 11 political subdivisions that have their own retirement systems. Issues to be resolved include (1) to what degree will retirement income be preserved; (2) who will pay the cost of that preservation; and (3) is the cost justified?
Structure of VRS Survivor Benefits *(VRS - 1993)*	Survivor benefits for retirees and members dying in active service are consistent with those provided by other public and private pension plans. There are differences in benefits paid to survivors of active employees and those paid to survivors of retirees. These differences are the result of public policy decisions made by the General Assembly.
Benefit Multiplier and Retirement Age Requirement for SPORS (*Feasibility and Effects of Raising the Retirement Allowance and Implications of Removing the Age Requirements for SPORS - Division of Legislative Services/House Appropriations Committee staff/VRS - 1993)*	SPORS provides above-average benefits relative to other states. Additional $3.3 million needed over 1994-96 to increase the benefit multiplier from 1.65 to 2 percent. Additional $13.7 million for political subdivisions providing LEORS benefits needed to raise the multiplier to 2 percent. If the 50 year age requirement were removed for State Police, it would cost the State an additional $755,000 during 1994-96. It would cost localities with LEORS benefits an additional $3.4 million.
Funding and Structure of Group Life Insurance Program *(JLARC - 1993)*	Benefit is generous, well funded, and inexpensive to provide. Uniform premium rate structure is appropriate. Suspension of premiums during FY 1994 decreased amount of prefunding, and reduced actuarial soundness of the program. VRS should conduct an actuarial valuation and adopt a formal funding policy for the program.
Retirement Age Requirement for State Police *(Retirement Benefits for State Police Officers and Other Law Enforcement Officers - Division of Legislative Services/House Appropriations Committee staff/VRS - 1988)*	Retirement eligibility requirements for SPORS should be reduced from 55 years of age and 30 years service to 50 years of age and 25 years service.

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Major Studies of VRS Benefit Issues, 1985 to Present (continued)

Benefit Issue/(*Study*)	**Key Findings/Recommendations**
SPORS-Equivalent Benefits for Sheriffs and Deputy Sheriffs *(Retirement Benefits for State Police Officers and Other Law Enforcement Officers - Division of Legislative Services/House Appropriations Committee staff/VRS - 1988)*	All localities participating in VRS should be required to provide sheriffs with SPORS-equivalent benefits, with retirement eligibility at 50 years of age and 25 years service. All other local law enforcement officers, including deputy sheriffs, would be eligible to retire at 50/25 if the locality opted to provide such an early retirement provision.
Eligibility for SPORS Benefits *(An Assessment of Eligibility for State Police Officer Retirement Benefits - JLARC - 1987)*	State Police face a far greater degree of hazards and risks than other law enforcement groups. Other law enforcement groups should not be added to SPORS at this time.
Service Credit Multiplier for Judicial Retirement System *(Report of the Joint Subcommittee Established to Review the Judicial Retirement System - House Appropriations Committee Staff - 1985)*	The JRS benefit is reasonable, and must be adequate to compensate for a relatively short period of service. A proposed reduction in the service credit multiplier to 2.5 will erode the State's ability to attract older candidates to judicial service, while saving relatively little money.

Source: JLARC staff analysis of prior VRS benefit studies.

Chronology of VRS Benefit Changes

PART ONE: SERVICE RETIREMENT

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
Benefit Formula			
VRS State/Teacher	Multiplier x Average Final Compensation x Years of Service	Additional three percent of total benefit (SB2008 of 1994 Special Session I)	Undetermined
VRS Political Subdivision	Same as above	Same as above (optional)	
SPORS	Same as above	Same as above	
LEORS	Same as above	Same as above (optional)	
JRS	Same as above	Same as above	
Benefit Multiplier			
VRS State/Teacher VRS Political Subdivision SPORS LEORS	Higher of 1.5 percent of AFC or 1.65 percent of AFC in excess of $1,200 *($1,200 indexed for members hired after 1/1/80)*	1.5 percent of first $13,200 AFC plus 1.65 percent of additional AFC; 1.65 percent with 35 years service (HB821 of 1990)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole
JRS	Same as above	1.65 percent (HB821 of 1990)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole
Service Multiplier			
VRS State/Teacher VRS Political Subdivision SPORS LEORS	N/A	N/A	
JRS	3.5	2.5 for judges appointed or elected to original terms commencing on or after 1/1/95 (HB510, SB2 of 1994)	Expenditure reduction of $141,680 for FY94-96; Constant decrease in employer contribution rates of 0.22 percent over a 30 year period
Calculation of Average Final Compensation			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Average of the three highest consecutive years of salary	N/A	
Annual Supplemental Benefit*			
VRS State/Teacher VRS Political Subdivision JRS	N/A	N/A	
SPORS LEORS *Note: Code of Virginia *requires VRS to adjust the supplement amount biennially, as recommended by the actuary, based upon increases in social security benefits*	$3,000 from date of retirement until age 65	$3,000 from date of retirement to age 58; $6,000 from age 58 to age 65 (HB774 of 1986) $3,240 from date of retirement to age 58; $6,480 from age 58 to age 65 (effective 7/1/89 - included in HB821 of 1990) $3,540 from date of retirement to age 58; $7,080 from age 58 to age 65 (effective 7/1/91)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole

(*continues*)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
(provision continued from previous page)		$3,540 from date of retirement to age 58, $7,080 from age 58 to age 65, or a level supplement to age 65 (HB729 of 1992)	None
		$7,752 from date of retirement to age 65 (SB733 of 1993)	Increased annual general fund expenditures of $430,000
		$8,304 from date of retirement to age 65 (effective 7/1/95)	
Vesting Period for Receipt of Benefit or Refund			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Five years	N/A	
Normal Retirement with Unreduced Benefit (Age/Years of Service)			
VRS State/Teacher	65/5 60/30	55/30 (HB1073, SB434 of 1987)	Additional expenses in the first year of $12.9 million. VRS will absorb these costs by increasing amortization period for unfunded accrued liability. No anticipated increase in employer contribution rate.
		55/20 for agency heads who are involuntarily terminated (HB615 of 1994)	Not determined
VRS Political Subdivision	65/5 Rule of 90	Option of either 55/30 or Rule of 90 (HB1073, SB434 of 1987)	Not determined
		55/20 for county administrators, county executives, city managers and school superintendents who are involuntarily terminated (HB1545 of 1995)	None
		55/20 for urban county executives, county managers, and town managers who are involuntarily terminated (optional) (SB296, HB 1407 of 1996)	Negligible
SPORS	60/5 55/30	50/25 (HB821 of 1990)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole
LEORS	60/5 55/30	50/25 optional (HB821 of 1990)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole
JRS	65/5 60/30	N/A	
Early Retirement with Reduced Benefit (Age/Years of Service)			
VRS State/Teacher	55/5	50/10 (SB776, SB959, HB2543 of 1995)	None
VRS Political Subdivision	55/5	50/10 (SB776, SB959, HB2543 of 1995)	
SPORS	50/5	50/10 (SB776, SB959, HB2543 of 1995)	None
LEORS	55/5 or 50/5 (option)	50/10 (SB776, SB959, HB2543 of 1995)	
JRS	55/5	N/A	

(*continues*)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
Early Retirement Incentive Programs			
	N/A	1991 Early Retirement Incentive Program (HB1499 of 1991): Eligibility - VRS members, age 50 with 25 years service Key Provisions - Five years additional service credit, unreduced benefit, COLA beginning in second year of retirement, $100 monthly supplement to age 62 1995 Workforce Transition Act: Eligibility - Full-time State employees except for members of the Judicial Retirement System. Key Provisions - Employees who are approved for a severance benefit, and who are vested and at least age 50, may use that benefit to purchase additional years, to be applied to either service or age, at a cost of 15 percent of salary for each year. Participating employees must leave State service by 5/1/95, unless an alternative date is agreed to by the employing agency, but no later than 7/1/96 (HB2543, SB959 of 1995)	$12.8 million net reduction (estimate later increased to $37.1 million) in salary and benefits during FY 1992. Actuarial loss to VRS of $238 million for State employees and $119 million for teachers No fiscal impact for retirement purposes because legislation requires agencies to transfer necessary funds for purchase of additional years to VRS within one year of employee's termination.
Mandatory Retirement Age			
VRS State/Teacher	70	None (SB478 of 1987)	None
VRS Political Subdivision	70	None (SB478 of 1987)	None
SPORS	70	N/A	
LEORS	70	None, but employer may impose a mandatory age based on a bona fide occupational qualification (HB488 of 1984)	No additional expenditures. Some undetermined savings might occur.
JRS	70	None (HB821 of 1990) 70 (SB170 of 1992)	None, if entire recodification of Title 51 of the *Code* is considered as a whole
Refunds			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Member contributions, plus employer-paid member contributions for individuals with all service rendered after 4/1/80, plus four percent interest	Member contributions, plus employer- paid member contributions, for all individuals plus four percent interest (HB821 of 1990) Refunds to include all employer-paid member contributions made on or after July 1, 1980 which had been credited to the employer's account (HB133 of 1994)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole None

PART TWO: DISABILITY RETIREMENT

Vesting Period for Receipt of Benefits			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	5 years	Immediate vesting (HB735 of 1986) Members who attain normal retirement age of 65 may still apply for disability retirement (HB465 of 1992)	 None

(*continues*)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
Benefit Multiplier			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Higher of 1.5 percent of AFC or 1.65 percent of AFC in excess of $1,200 (Regular disability, vested and non-vested) Minimum disability retirement allowance + one-half of social security disability benefit = one-quarter AFC or $1,000, whichever is greater Special guaranteed disability benefit + one-half social security disability benefit = two-thirds AFC Direct offset of social security disability benefit and workers compensation award	Member with 5 years service receives higher of minimum guarantee or 1.65 percent AFC X years of service (offset for workers compensation award) (HB821 of 1990) Work-related minimum guarantee benefit - 66.6 percent AFC if member does not qualify for primary social security benefit; 50 percent AFC if member does qualify for social security, plus refund of accumulated contributions and interest (offset for workers compensation award) (HB821 of 1990) Non-work related minimum guarantee - 50 percent AFC if member does not qualify for primary social security benefits and 33.3 percent AFC if member does qualify. (HB821 of 1990)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole
Heart/Lung Presumption			
VRS State/Teacher VRS Political Subdivision JRS	None	N/A	N/A
SPORS LEORS	Presumption of Work-Related Disability from respiratory disease, heart disease and hypertension	N/A	N/A

PART THREE: OTHER BENEFITS, OPTIONS, AND PROVISIONS

Situations in Which Prior Service Credit May be Purchased (Cost of Purchase)			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Refund received after 7/1/42 (Five percent of salary) Personal sick leave after 1/1/64 (Five percent of salary) Maternity leave after 1/1/64 (Five percent of salary)	Purchase of prior service credit, at five percent of salary, if employee originally hired after age 60 but excluded from VRS due to age, and employee paid the member contribution during the time period in question (SB 513 of 1987) Purchase of prior service credit, at fifteen percent of salary, for period of federal civil service (HB821 of 1990)	Negligible None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole

(*continues*)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
(provision continued from pervious page)	Educational leave or leave for temporary employment with General Assembly (Five percent of salary) Service in another public employee retirement system (Fifteen percent of salary) Active military service (Fifteen percent of salary) Originally hired after age 60 but excluded from VRS due to age, and employer paid the member contribution during the time period in question (Service credit granted at no cost to member)	Prior service credit granted at no cost if employee returns to service from military leave of absence within 12 months of receiving honorable discharge (HB821 of 1990) Cost of service based on current contribution rate and creditable compensation or AFC, whichever is higher; Military service rendered through reenlistment beyond cessation of hostilities not creditable; Member need not be in service to receive free credit for military service; Purchase of certain service credit after termination is prohibited (HB465 of 1992) Maximum of four years may be purchased for leave without pay for education or for temporary service with the General Assembly (HB1987 of 1993) Maximum of two years at no cost may be granted for any involuntary, unpaid maternity leave prior to July 1, 1974, provided member returned to covered position within one year of expiration of leave (HB615 of 1994) Deletes requirement that member return to covered position within one year of expiration of leave in order to receive no-cost service credit for involuntary, unpaid maternity leave prior to July 1, 1974 (HB1760 of 1995) Maximum of five years of prior service credit granted, at no cost to members, to full-time employees of the General Assembly who were previously employed by General Assembly on a temporary basis for at least one Session. Cost of additional service credit to be paid by employer at 15 percent of salary rate (HB1760 of 1995) Maximum of three years can be purchased, at five percent rate, for prior active military service, service in the retirement system of another state, or both. Individual must be vested with at least 25 years of service to make this purchase. (HB 901 of 1996)	None, if entire recodification of Title 51 of the *Code of Virginia* is considered as a whole None VRS unable to estimate fiscal impact since the number of affected individuals is unknown Fiscal impact can not be ascertained since the number of teachers who will take advantage of this provision is unknown Insignificant due to limited applicability Insignificant due to limited applicability State: $814,420 annually Local: $439,120 annually

(continues)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
Maximum Benefit Amounts			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Retirement benefit plus one-half of social security benefit can not exceed average final compensation (Pre-April 1, 1980 members)	Compensation used in computing benefits shall not exceed the higher of $200,000 or the amount determined by the Commissioner of the Internal Revenue Service as the limitation for calendar years after 1989. Benefits shall be adjusted accordingly, provided that no member's benefit shall be reduced below the amount determined as of 12/31/88 (HB 821 of 1990)	None
	Retirement benefit plus one-half of social security benefit can not exceed 62.5 percent of average final compensation (Post-April 1, 1980 members)	Compensation used in computing benefit shall not exceed $235,840 (for pre-January 1996 members) or $150,000 (for post-January 1996 members). Benefit amounts shall be adjusted accordingly. (HB 1899 of 1995)	None
Benefit Payment Options			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	Basic benefit, 100 percent survivor, 50 percent survivor, and social security options	Leveling option replaced social security option (SB817 of 1993)	None
Cost of Living Adjustment			
VRS State/Teacher VRS Political Subdivision JRS	First 3 percent of consumer price index increase; Plus half of each percentage consumer price index increase from 3 percent to 7 percent; Maximum cost of living adjustment of 5 percent; Start to receive at age 60	Start to receive on July 1 of second calendar year after retirement (HB1499 of 1991)	
SPORS	Start to receive at age 55	Same as above	
LEORS	Start to receive at age 55	Same as above	
Death in Service			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JR	Amount equal to 100 percent survivor option, or refund of contributions and four percent interest (Non-work related death after age 65)	Specified precedence of recipients of benefits, accumulated contributions, and interest in the event member dies in service without a beneficiary designation (HB735 of 1986) Survivor may receive excess accumulated member contributions plus interest even if retiree selected leveling option (HB1899 of 1995)	 None

(continues)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
(provision continued from pervious page)	Amount equal to one-half of 50 percent survivor option, or refund of contributions and four percent interest (Non-work related death prior to age 65) 33.3 percent AFC if beneficiary qualifies for social security survivor benefits, plus refund of member contributions and interest. 50 per-cent AFC if not qualified for social security (Work related death)		
Group Life Insurance			
VRS State/Teacher VRS Political Sub-division SPORS LEORS JRS	Natural death benefit equal to annual salary rounded to next highest thousand and then doubled Accidental death benefit equal to annual salary rounded to next highest thousand and then quadrupled Dismemberment benefit equal to annual salary rounded to next highest thousand and then quadrupled for accidental loss of one or more limbs or sight in both eyes Dismemberment benefit equal to annual salary for accidental loss of one limb or sight in one eye For individuals who retire on or after June 30, 1980, insurance amount decreases two percent each month until it reaches 25 percent of original amount Individual may convert group coverage to individual policy within 31 days of termination from VRS	Increased coverage for employees who remain in service past age 70 by basing coverage on current salary rather than salary at age 70 (HB150 of 1982)	Maximum of $40,000 in additional VRS contributions over the long term
		Group life insurance coverage for members on military leave without pay increased from two to 24 months (HB1694 of 1991)	None
		Two percent post-retirement monthly reduction in amount of insurance coverage made applicable to all retirees (HB1694 of 1991)	None
		Members who are age 70 when first employed or reemployed may participate (HB341 of 1992)	Little or none
		Increases life insurance benefit for pre-7/1/70 retirees to annual salary rounded to next highest thousand and then doubled, with reduction taken from that amount (HB1421, SB612 of 1995)	Undetermined
		Allows State employees who are involuntarily terminated and retire under 55/20 to participate (HB 1407, SB 296 of 1996)	Negligible
		Allows members of VRS and SPORS who are eligible for 50/10 to defer retirement -- making them able to continue participating in the program (HB 895 of 1996)	None

(continues)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
Optional Life Insurance			
VRS State/Teacher VRS Political Subdivision SPORS LEORS JRS	VRS Board authorized to develop optional insurance program	Optional insurance program mandated to provide additional coverage for employees, their spouses and children (SB1064 of 1995)	$388,000 in start-up costs for Life of Virginia. Undetermined costs for VRS administrative and systems development. Total premium to be paid by employee
Health Care Credit			
VRS State employees VRS Teachers (optional) SPORS LEORS (optional) JRS	N/A	Health care credit of $1.50 per month, with an annual maximum of $45.00 or the cost of the health insurance premium, to State retirees with 15 years service (HB1553 of 1989)	Employer contribution rate will increase by an amount ranging from 0.42 percent to 0.70 percent. Expenditures in the first year will increase by an amount ranging from $5.3 million to $8.9 million.
		State retiree health care credit increased to $2.50 per month, with annual maximum of $75.00 or the amount of the premium; Provided school boards and political subdivisions with option of providing health care credit of $1.50 per month, with an annual maximum of $45.00 (HB688 of 1992)	Additional expenditure of $10.8 million in FY 1993. Additional State cost of 0.4 percent of payroll during following fiscal years. Cost to State for teachers based on participation and composite index.
		Allows State retirees who do not participate in the State health care program to receive the health care credit, subject to DPT regulations (HB1852, SB780 of 1993)	None
		Allows individuals who have deferred receipt of retirement benefits to receive the health care credit. VRS responsible for determining eligibility for health care credit. (HB1700, SB897 of 1995)	None
		Makes teacher retiree health credit mandatory, cost to be borne by State, effective 7/1/98. Local school boards have option of providing additional credit of $1.00 per month for each year of service -- $30 maximum. (HB 862 of 1996)	$11,972,200 annually
Deferred Compensation			
VRS State employees SPORS JRS	Program administered by Deferred Compensa-tion Commis-sion	VRS administers deferred compensation program under direction of Deferred Compensation Commission (HB844 of 1984) Deferred Compensation Commission reconstituted as Deferred Compen-sation Board (HB1322 of 1985)	None

(continues)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	Estimated Fiscal Impact
(provision continued from previous page)		Program administered by VRS Investment Department under the direction of the Deferred Compensation Board. Specified legal list of investment products. (HB1401 of 1987)	None
		Program administered by VRS Board of Trustees. Legal list of investment products repealed. (HB304 of 1992)	None
Optional Retirement Program			
	Institutions of higher education may establish their own retirement plans for employees engaged in the performance of teaching, administrative or research duties. Eligible employees may irrevocably elect participation in either the institution's retirement plan or VRS. Contribution rate shall not exceed VRS employer contribution rate.	State contribution shall be 10.4 percent of creditable compensation for employees of institutions of higher education. Contribution rates shall be examined by Secretary of Administration prior to 7/1/96 and every six years thereafter. VRS shall develop policies and procedures , as approved by Secretary of Administration and Secretary of Education, for administration of all optional retirement programs. (HB1935 of 1991)	Introduced budget bill includes $1.4 million to implement this provision
		Teaching hospitals affiliated with institutions of higher education may establish their own retirement plans for health care providers. Contribution rates shall be lesser of total required VRS employer contribution rate or 8 percent of creditable compensation (SB368 of 1991)	Potential savings of $8.7 million estimated by MCV and UVAH. Approximately 15-20% of this would result in general fund savings for the Commonwealth.
		Employees may transfer accumulated VRS contributions into optional retirement plan. (HB465 of 1992)	None
		Medical College of Virginia Hospitals Authority may establish one or more retirement plans for its employees, and may make contributions to the plan. Employees currently in the optional retirement program may stay or join any new plan. Employees currently in VRS may remain, or join any new plan. New employees can elect to join either VRS or any new plan.	None specified

(continues)

Benefit Provision	Status in 1980	Benefit Change/(Bill Number)	
(provision continued from previous page)		The contribution made by the Authority shall be the lesser of eight percent, or the contribution required by the State if the employee were a member of VRS. New plan shall offer same investment opportunities as current optional retirement program for teaching, administrative, and research personnel. Employees who transfer from VRS to new plan shall have assets equal to actuarial present value of accrued benefit transferred to new plan. (SB 607, HB 1524 of 1996)	
		University of Virginia Medical Center may establish one or more retirement plans for its employees, and may make contributions to the plan. Employees currently in the optional retirement program may stay or join any new plan. Employees currently in VRS may remain, or join any new plan. New employees can elect to join either VRS or any new plan. The contribution made by the Medical Center shall be eight percent, but employees who transfer from the optioinal retirment program to any new plan shall continue to receive their current contribution rate. (SB 389, HB 884 of 1996)	None specified

Source: JLARC staff analysis of VRS documents, legislative impact statements, and Acts of Assembly.

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Contents of Part III: Funding of Benefits

Part III: Funding of Benefits

In a defined benefit pension plan the employer agrees to provide the employee with a specified benefit at retirement. Within VRS, the State and its political subdivisions must arrange to fund these promised benefits. This is done in accordance with the funding policy, based on actuarial principles, under which the defined benefit plan is managed.

Actuaries have developed a general theory of pension funding. According to the theory, the present value of future contributions to the system plus plan assets currently held in reserve must equal the present value of future plan benefits and expenses. Actuarial theory further states that if contributions are made in advance in the exact amount and according to the schedule recommended by the actuary, a pension fund will accumulate sufficient assets over time to pay for the expected post-retirement benefits of all plan members.

VRS pension benefits are paid for 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 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, and judges. Each political subdivision has its own unique employer contribution rate.

Pension Funding Policy

Ideally, pension plan sponsors and trustees, such as the State, its political subdivisions and the VRS Board, should adopt a funding policy that is independent of any actuarial methodology that is later chosen to implement the policy. However, in practice, the funding policy is often implicit within the actuarial method. In that case, the retirement system and its actuary need to clearly articulate the elements of the funding policy that are implicitly determined by the actuarial methods. There are four primary elements to pension funding policy:

- calculation of future pension costs,
- development of an asset accumulation target,
- establishment of a contribution schedule, and
- recognition of unanticipated plan experience.

The first element of pension funding policy is calculation of the present value, or cost, of pension benefits that have been promised to VRS members. The actual future cost of an active member's projected pension benefit is unknown at the time that the member and the employer make contributions to VRS. Therefore, the State and its political subdivisions must rely on present value estimates of future costs. In order to calculate an estimate of pension costs, assumptions must be made about variables such as the life expectancy of active members and retirees, the rate of turnover among active employees, and the amount of future salary increases. The most recent VRS actuarial valuation, performed as of June 30, 1994, calculated a total actuarial liability for current active and retired members of $28.6 billion.

The second element of funding policy is determination of the level of assets that need to be accumulated by the retirement system in order to adequately provide for the future cost of pension benefits. A benchmark measure, tied to the desired asset level, should be selected for use in monitoring the retirement system's funding progress. The asset accumulation target for VRS is the amount of its total actuarial accrued liability. Since the exact cost of future pension benefits is unknown, the amount of required pension plan funding over the long term also has a degree of uncertainty.

A third funding policy element is establishment of a schedule of contributions to reach the desired asset accumulation level. In order to do this, the plan's trustees must allocate the present value of promised future pension benefits over a period of years in such a manner that the necessary amount of assets will eventually accumulate. This is done using a technique called an actuarial cost method. The *Code of Virginia* requires that VRS employer contribution rates be calculated in such a manner as to remain a relatively stable percent of payroll over time. In an attempt to satisfy this requirement, VRS uses the entry age normal cost method, which is one of several generally-accepted actuarial methods.

The final element of pension funding policy is a set of decisions concerning the manner and speed in which unanticipated experience, such as lower than expected investment returns or salary increases or a higher than expected number of retirements, will be recognized. VRS applies any actuarial gains or losses to its unfunded accrued liability. This results in the unfunded accrued liability either increasing or decreasing.

Adequacy of VRS Pension Funding

The VRS defined pension benefit may be the only source of retirement income - besides social security benefits - for those VRS members who have little personal savings, no individual retirement accounts or deferred compensation plans, and no dividend or interest income. For that reason, the degree of security attached to the promised VRS benefit is of the utmost concern. Proper and adequate funding of VRS benefits enhances that level of security.

VRS funding levels, as measured using a number of different indicators, have generally improved over the past 15 years. This improvement is due in large part to the positive influence of investment income. According to JLARC's actuary, Foster Higgins, the overall VRS funding level is reasonably sound. However, the funding level of the Judicial Retirement System (JRS) has historically been low by comparison. According to Foster Higgins, JRS is not adequately funded at the present time.

Pension funding is not always performed in strict accordance with actuarial theory. Actions taken by the plan sponsor which are counter to the amount and schedule of contributions recommended by the actuary create actuarial losses and erode the system's ability to pay for the expected post-retirement benefits of all plan members. Furthermore, failure to pay in advance for the cost of certain types of benefits, such as cost-of-living-adjustments, also damage a system's future financial viability.

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. For that reason, it is very valuable to VRS retirees. Historically, the COLA has been funded on a pay-as-you-go basis, rather than in advance as in the case of the pension benefit itself. Over time, this funding approach has restricted the overall funding status for the VRS pension benefit to a level that, while still reasonably sound, is below the national average for state employee retirement systems.

New financial reporting standards recently issued by the Governmental Accounting Standards Board (GASB) will likely serve as an incentive for further improvements in VRS pension funding. Under the new standards, any difference between the amount of employer contributions determined by the actuary and the amount actually contributed must be recorded as long-term debt on the State's annual financial statement. This is a potential problem for Virginia because the new standards also require the VRS actuary to include the cost-of-living adjustment (COLA) in the calculation of the employer contribution. Under the new GASB standard, the cost of the COLA can no longer be accounted for on a pay-as-you-go basis.

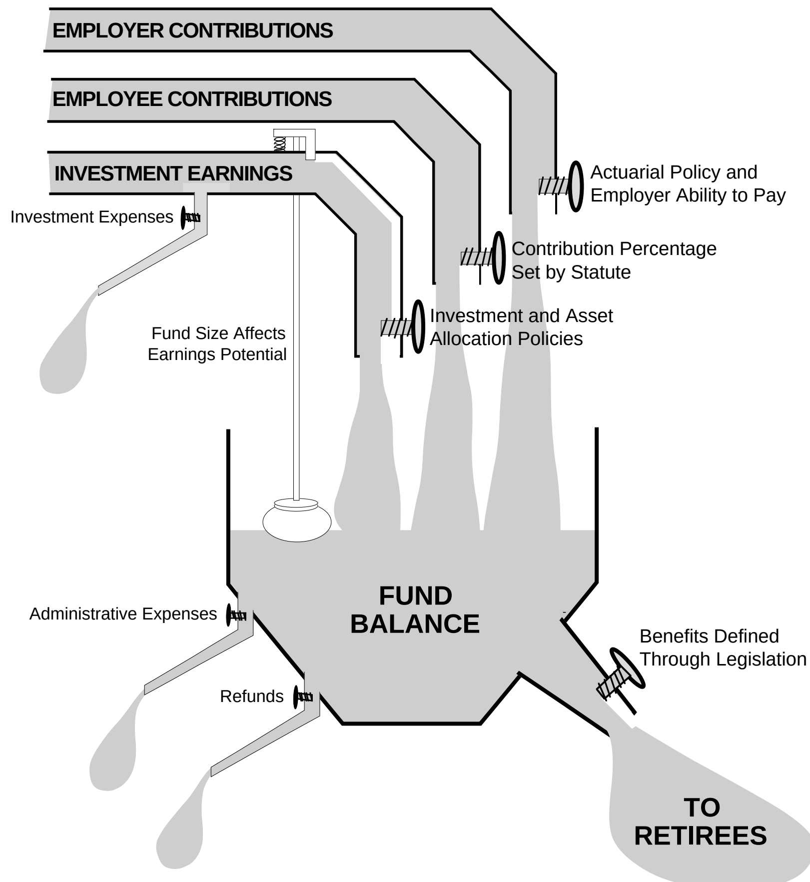
The most useful issue to focus on concerning pension plan funding is not whether a plan is currently fully funded, but whether the plan is on a schedule that is reasonably intended to reach that goal. The June 30, 1994 VRS actuarial valuation recommends employer contribution rates based on full prefunding of the COLA. As a result, the unfunded accrued liability increased significantly, from less than $200 million on June 30, 1992 to $4.8 billion, exclusive of the political subdivisions. Under the VRS funding policy, this unfunded accrued liability will be amortized over a 30 year period with the amortization payments increasing four percent annually.

Group Life Insurance Funding

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 Life of Virginia 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.

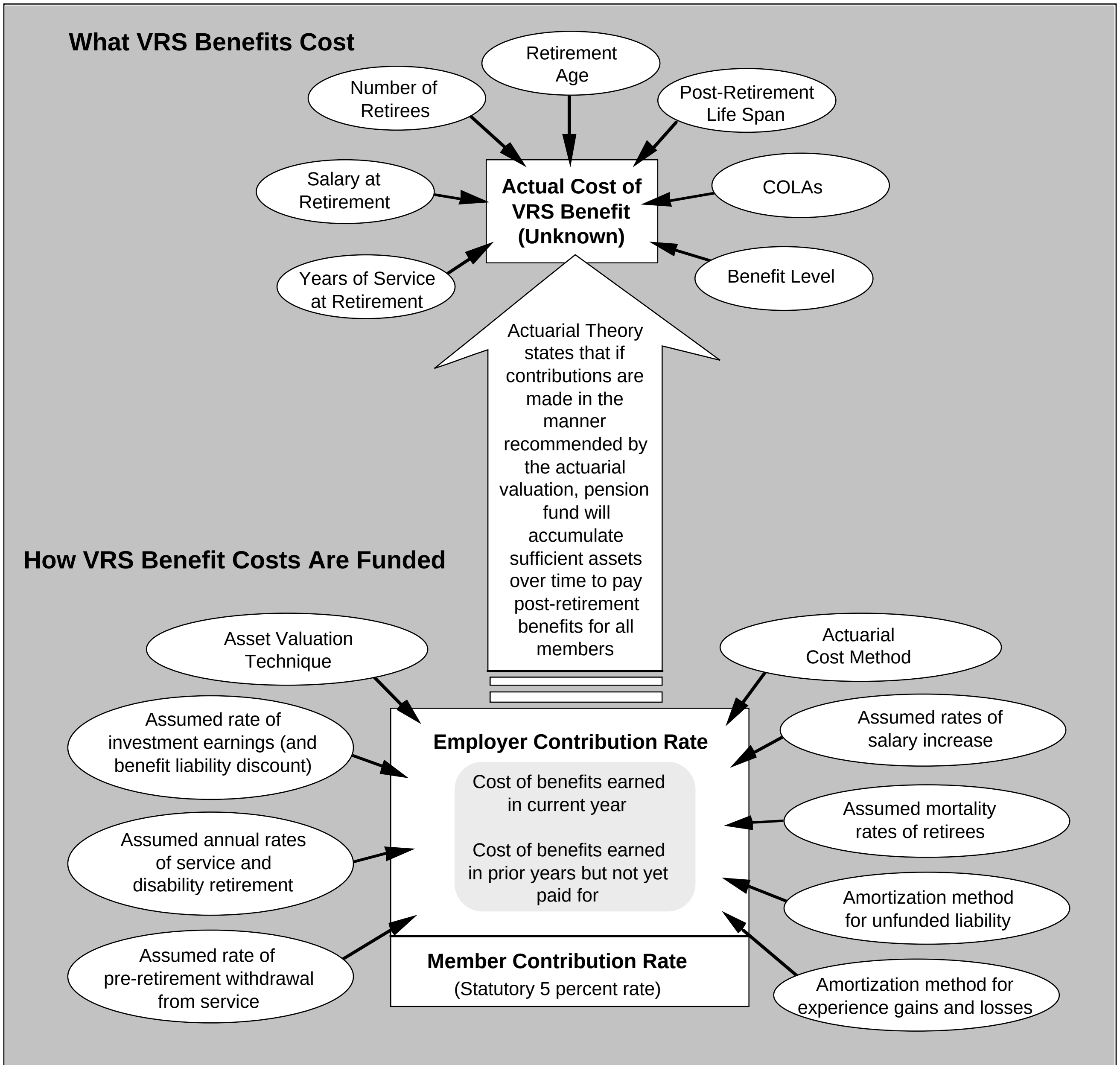
During the early 1990's, the actuarially-determined contribution rate for the group life insurance program decreased several times. These decreases were due to the program's favorable mortality and investment experience. However, the contribution rate recommended by the actuary recently increased. This increase is largely attributable to a suspension of premiums required by the 1993 Appropriations Act.

Overview of the VRS Funding Elements



Source: JLARC staff graphic based on graphics from *The Theory and Practice of Pension Funding* (by C.L. Trowbridge and C.E. Farr, 1976) and *Harvard Business Review*.

VRS Contribution Rate-Setting Process



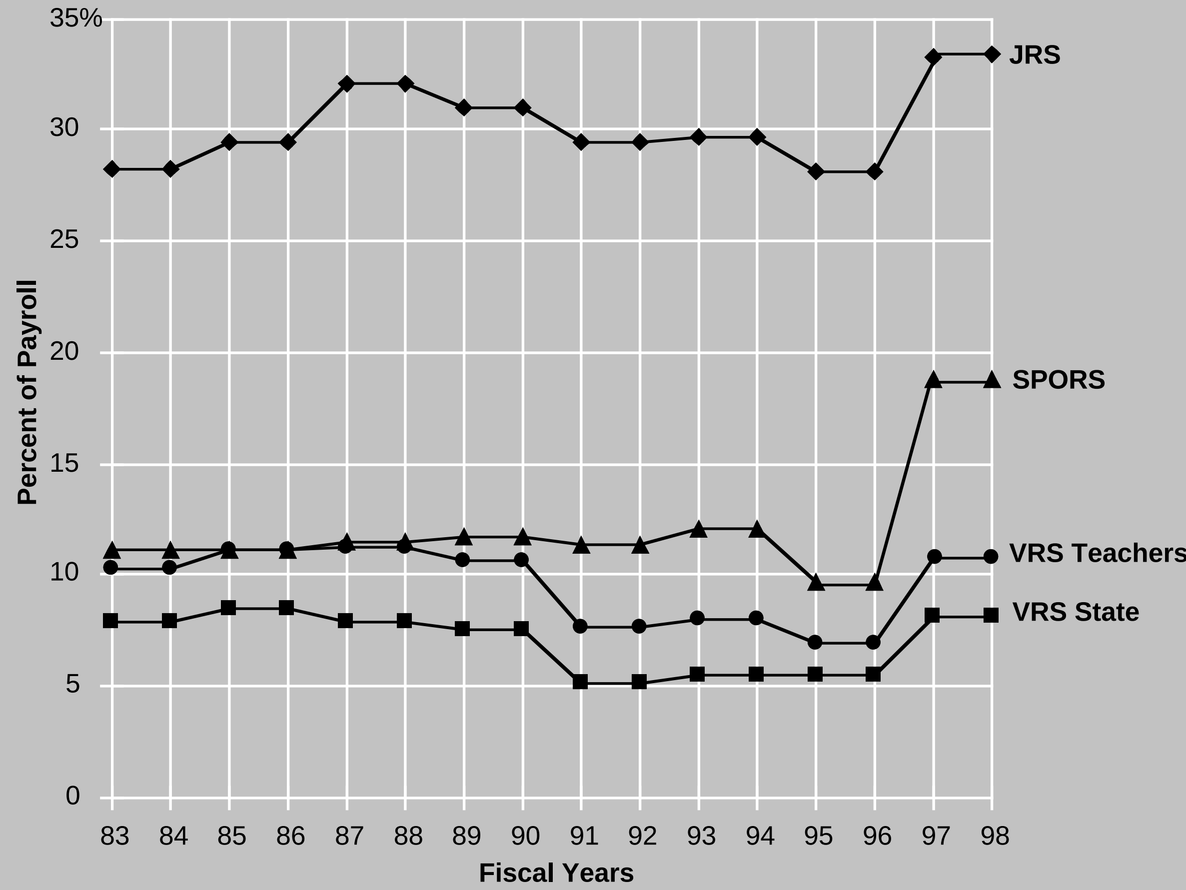
Source: JLARC staff analysis of pension funding literature and VRS actuarial reports.

VRS Employer Contribution Rate-Setting Process for July1, 1996 - June 30, 1998 Biennium

Process Element	Factors Impacting the Process	Key Player(s) Involved in Process	Time Frame
Determine Current Cost of Promised Benefits	Current Benefit Level Actuarial assumptions: Future salary increases resulting from both wage inflation and individual merit Interest rate used to discount future value of benefits Separation from service, or death, of individuals prior to retirement Percentage of individuals retiring each year Life expectancy of individuals after retirement	VRS Actuary - Performs calculations VRS Staff - Provides necessary data to actuary VRS Board - Approves all calculations and assumptions	Summer 1994 - April 1995
Allocate Current Cost Over a Period of Years so that Sufficient Assets are Accumulated	Choice of Actuarial Cost Method Choice of Asset Valuation Technique Actuarial Assumptions (see above)	VRS Actuary - Performs calculations General Assembly - May require use of specific methods or assumptions	Summer 1994 - April 1995
Recognize effect of differences between actuarial assumptions and actual plan experience	Choice of amortization technique	VRS Actuary	Summer 1994 - April 1995
Provide Actuarial Valuation Report with Recommended Employ-er Contribution Rates	Significant potential change in funding policy (i.e. prefunding cost-of-living-adjustment)	VRS Actuary	April 1995
Consider Actuary's Recommendations, Approve Employer Contribution Rates, and Submit Rates to Governor and Governing Bodies of Political Subdivisions	Significant potential change in funding policy (i.e. prefunding cost-of-living-adjustment) GASB Statement Nos. 25 and 27	VRS Board of Trustees VRS Staff	Ongoing
Incorporate Employer Contribution Rates into State and Local Budgets	Employer's financial outlook GASB Statement No. 27	Governor Secretary of Finance Department of Planning and Budget Political Subdivisions	Fall 1995
Appropriate Funds Necessary to Make Approved Contributions	Employer's financial outlook GASB Statement No. 27	General Assembly Legislative Money Committees Local Governing Bodies	1996 Session

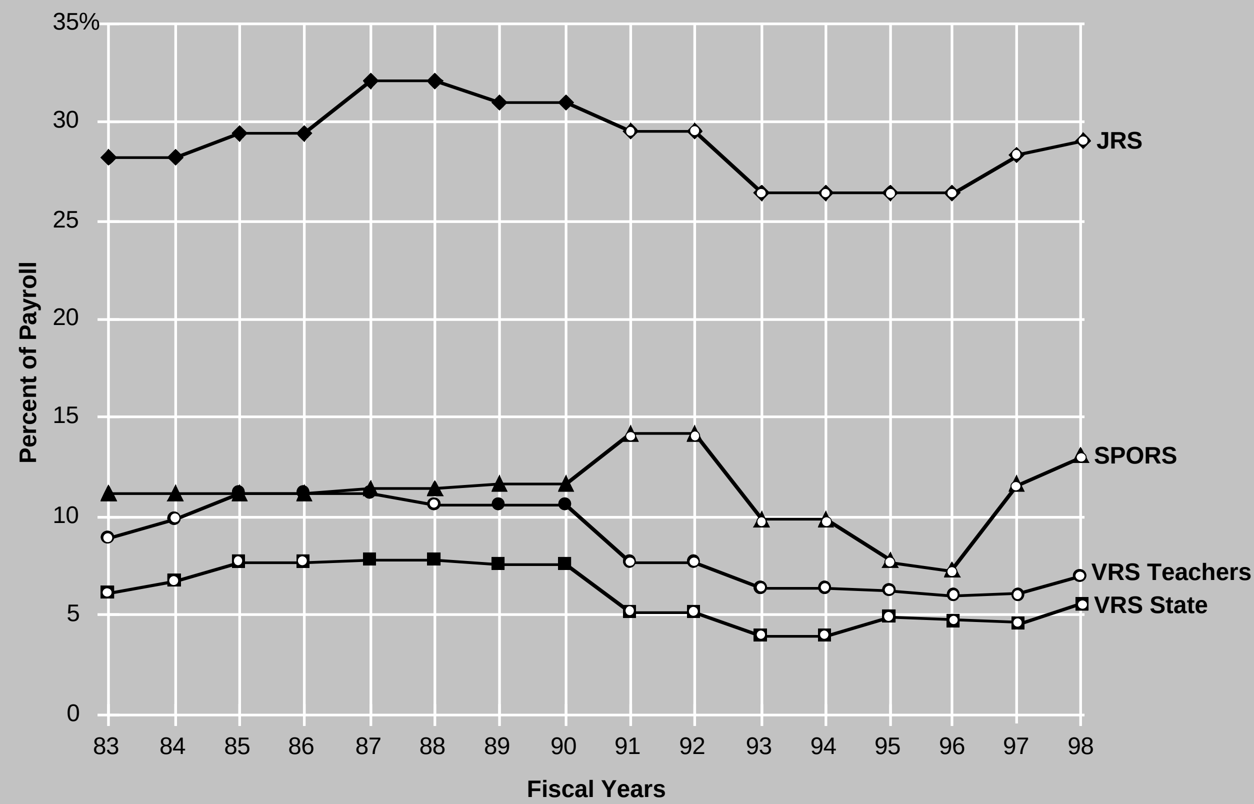
Source: JLARC staff analysis of VRS documents, and JLARC staff interviews with staff from VRS, Department of Planning and Budget, and legislative money committees.

Actuarially-Determined VRS Employer Contribution Rates



Source: JLARC staff analysis of VRS annual report and actuarial valuation data.

Actual VRS Employer Contribution Rates



Note: Hollow symbols indicate years when initial actuarially-determined rates and actual rates differ.

Source: JLARC staff analysis of VRS annual report and actuarial valuation data.

Differences Between Initial Actuarially-Determined Contribution Rates and Actual Employer Contribution Rates

Fiscal Year	Employee Group(s)	Initial Actuarially-Determined Rate	Actual Rate	Reason for Difference
1983 and 1984	State Employees Teachers	7.89 10.25	6.15 (FY 1983) 6.77 (FY 1984) 8.86 (FY 1983) 9.90 (FY 1984)	VRS Board approved a three-year phase in of the rates computed in the 1980 valuation, after House Appropriations Committee inquired about the possibility of a phase-in.
1985 and 1986	State Employees	8.43	7.68	Undetermined
1988	Teachers	11.2	10.53	The VRS Actuary recalculated the supplementary portion of the contribution rate in December 1986. Due to the lower-than-expected increases in the CPI, and higher-than-anticipated payroll increases, the revised rate was lower than the originally calculated rate. It is not clear whether the request to recalculate the rate came directly from the VRS Board.
1991 and 1992	State employees Teachers SPORS JRS	8.72 11.76 14.22 29.49	5.12 7.68 11.37 29.49	VRS Board approved employer contribution rates in April 1989 which were based on full prefunding of the COLA. VRS Board approved revised rates in August 1990 which used pay-as-you go approach for funding the COLA. Actual biennial contributions were reduced by $31.5 million due to 8.3 percent investment earnings assumption required by Appropriations Act.
1993 and 1994	State Employees Teachers SPORS JRS	5.45 7.96 12.04 29.66	3.98 6.36 9.83 26.41	VRS Board approved employer contribution rates which used a pay-as-you-go approach for funding the COLA. Actual rates were reduced in response to a change, required by the Appropriations Act, from book asset valuation to modified market asset valuation. The resulting $1 billion in additional asset value was amortized over a 15-year period.

(continues)

Differences Between Initial Actuarially-Determined Contribution Rates and Actual Employer Contribution Rates (continued)

Fiscal Year	Employee Group(s)	Initial Actuarially-Determined Rate	Actual Rate	Reason for Difference
1995 and 1996	State Employees Teachers SPORS JRS	5.42 6.86 9.69 28.09	4.92 6.19 7.79 26.41	VRS Board approved actuarial determined rates, using pay-as-you-go approach for COLA, in April 1993. 1994 Appropriations Act required a reduction in those rates.
1997	State Employees Teachers SPORS JRS	8.00 10.79 18.66 33.45	4.85 6.41 12.07 27.99	Initial actuarially-determined rates based on full prefunding of COLA, with increased rates taking effect immediately in FY 97. VRS Board provided Governor and legislative money committees with three different rate options -- reflecting full prefunding, partial prefunding, and continued pay as you go. Governor's budget proposal, approved by the General Assembly, was based on partial prefunding of COLA. Required rate increases would be phased in over five years beginning in FY 98. Actual rates for FY 97 reflect continued pay-as-you-go approach. The partial prefunding approach contained in the budget differs from the partial prefunding option proposed by VRS. Subsequent calculations by the VRS actuary, under the same partial prefunding approach as used in the budget, resulted in slightly higher rates.
1998	State Employees Teachers SPORS JRS	8.00 10.79 18.66 33.45	5.48 7.48 13.38 29.10	See above

Source: JLARC staff analysis of VRS documentation and Appropriations Act provisions.

Characteristics of Four Actuarial Cost Methods

Characteristic	Actuarial Cost Method: Entry Age Normal	Projected Unit Credit	Aggregate	Frozen Initial Liability
Normal Cost	Cost of benefit spread as a level percentage of payroll determined from employee's age at time of entry into retirement system	Value of benefits accruing in current year based on estimated salary at date of retirement	Level percentage of future payroll to fund remaining cost	Level percentage of future payroll to fund the net remaining cost that is in excess of the unfunded past service liability
Actuarial Accrued Liability	Theoretical sum of all prior normal costs with interest	Value of accrued benefits at beginning of year based on estimated pay at retirement	Not applicable	Calculated only at the time this method is originally adopted and at the time of plan amendments; may be calculated under the entry age normal or projected unit credit method
Pattern of Normal Cost Contributions	Level percentage of payroll	For an individual, increases seven to 11 percent for each year of age. For a group, increases with average age	Percentage of payroll may vary, reflecting actuarial gains/losses and plan amendments	Percentage of payroll may vary, reflecting actuarial gains/losses
Pattern of Amortization Cost Contributions	May be a level percentage of payroll or a level dollar, decreasing percentage of payroll	May be a level percentage of payroll or a level dollar, decreasing percentage of payroll	Not applicable	May be a level percentage of payroll or a level dollar, decreasing percentage of payroll
Asset Accumulation Target	Actuarial accrued liability	Actuarial accrued liability (also referred to a pension benefit obligation)	Not applicable	Not applicable
Impact of actuarial gains/losses	Decrease/increase actuarial accrued liability; amortized in accordance with funding policy	Decrease/increase actuarial accrued liability; amortized in accordance with funding policy	Spread as a level percentage over future payroll as part of normal cost	Spread as a level percentage over future payroll as part of normal cost
Degree of Conservatism	Medium	Low	High	Medium

Notes: Normal cost is the cost of pension benefits accruing during the current year. Amortization cost is portion of the total unfunded liability scheduled to paid during the current year. Degree of conservatism refers to the relative rate at which assets are accumulated.

Source: A. Foster Higgins & Co., Inc.

Trends of Significant VRS Financial and Demographic Characteristics

Characteristic	FY 1983	FY 1995	Average Annual Percentage Change FY 1983 - FY 1995
Active Members	211,700	262,297	2.0
Retired Members	40,200	78,100	7.9
Total Assets (book value)	$3,145,009,104	$17,581,134,000	38.3
Total Reserve Funds	$3,086,986,884	$16,871,249,000	37.2
Present Value of Total Actuarial Liabilities*	$8,709,001,000	$28,603,084,000	19
Total Revenues	$765,600,000	$2,185,608,000	15.5
Total Expenses	$221,141,709	$836,250,000	23.2
Administrative Expenses	$7,989,709	$11,575,000	3.7
VRS Employees (full-time equivalent positions)	96	134	3.3

*Notes: Data are for biennial actuarial valuations of June 30, 1982 and June 30, 1994. Cost of living adjustment not reflected in total actuarial liabilities until June 30, 1994 valuation.

Source: JLARC analysis of financial data contained in VRS annual reports.

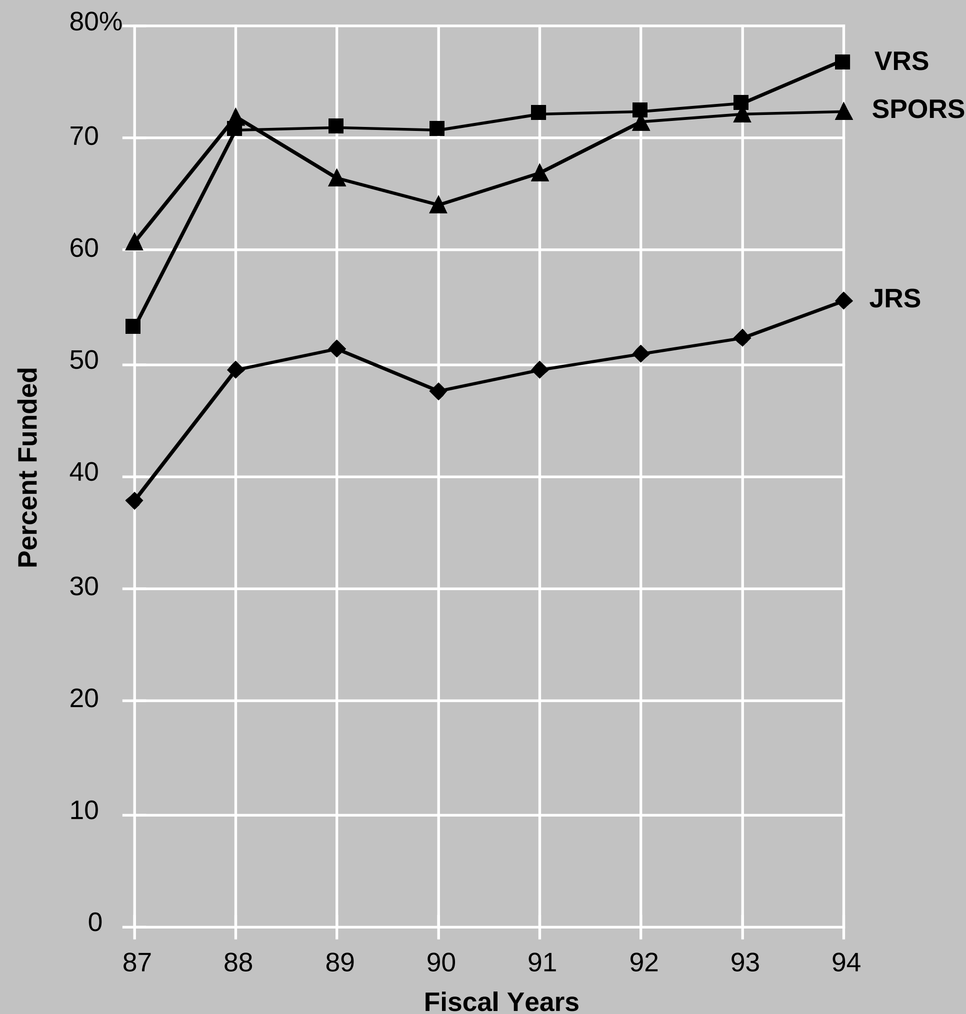
Comparison of VRS Financial and Demographic Characteristics with Other State Retirement Systems

Characteristic	Virginia	Average of State Retirement Systems	Highest	Lowest
Active Members	263,071	141,949	618,000 California	11,468 Vermont
Total Active, Retired and Terminated Vested Members	352,417	199,851	913,000 California	17,481 Vermont
Ratio of Active Members to Retired and Terminated Vested Members	2.94	2.49	4.02 North Dakota	1.29 Pennsylvania
Total Reserve Funds	$15.5 Billion	$10.8 Billion	$64.9 Billion California	$0.6 Billion North Dakota
Pension Benefit Obligation Funding Ratio	75 percent	89.6 percent	129.2 percent Arkansas	32.5 percent Maine
Revenue to Expense Ratio	2.52	2.49	4.52 Florida	1.31 New Hampshire
Administrative Expenses Per Active Member	$41.68	$91.24	$724 Vermont	$14.24 North Carolina
Administrative Expenses Per All Members	$31.12	$63.31	$475 Vermont	$11.47 North Carolina

Note: All data are for FY 1994.

Source: JLARC staff analysis of state retirement system annual reports, and 1994 PENDAT database compiled by Public Pension Coordinating Council.

Trend in Pension Benefit Obligation Funding Ratios



Source: JLARC staff analysis of VRS annual report and actuarial valuation data.

Calculation of Pension Benefit Obligation Funding Percentage

The pension benefit obligation (PBO), a standardized measure of pension liability, is required to be disclosed in the VRS Annual Report in accordance with Governmental Accounting Standards Board (GASB) rules.

PBO is the present value of pension benefits - including cost-of-living-adjustments - estimated to be payable in the future as the result of employee service to-date, adjusted for the effects of projected salary increases.

PBO is calculated using the projected unit credit actuarial cost method, which is different from entry age normal actuarial cost method used by VRS to establish employer contribution rates.

Key actuarial assumptions in PBO calculation:

8 percent investment return
5 percent total salary increase
3.1 percent annual cost of living adjustment

PBO Funding Percentage compares pension liability to the assets available to pay pension benefits:

PBO Funding Percentage = Net Assets Available for Benefits / PBO

State Employees:	81.8% = $4,952,500,000 / $6,057,800,000
Teachers:	71.9% = $7,011,800,000 / $9,752,200,000
State Police:	72.5% = $191,000,000 / $263,600,000
Judges:	55.5% = $109,400,000 / $197,000,000
Total Excluding Political Subdivisions:	75.4% = $12,264,700,000 / $16,270,600,000

GASB allows net assets available for benefits to be determined using either market value or book value.

Most states, including Virginia, use book value.
13 states use market value

Net Assets Available for Benefits	= equals	Pension Trust Fund Reserves	- minus	Current Year Liabilities

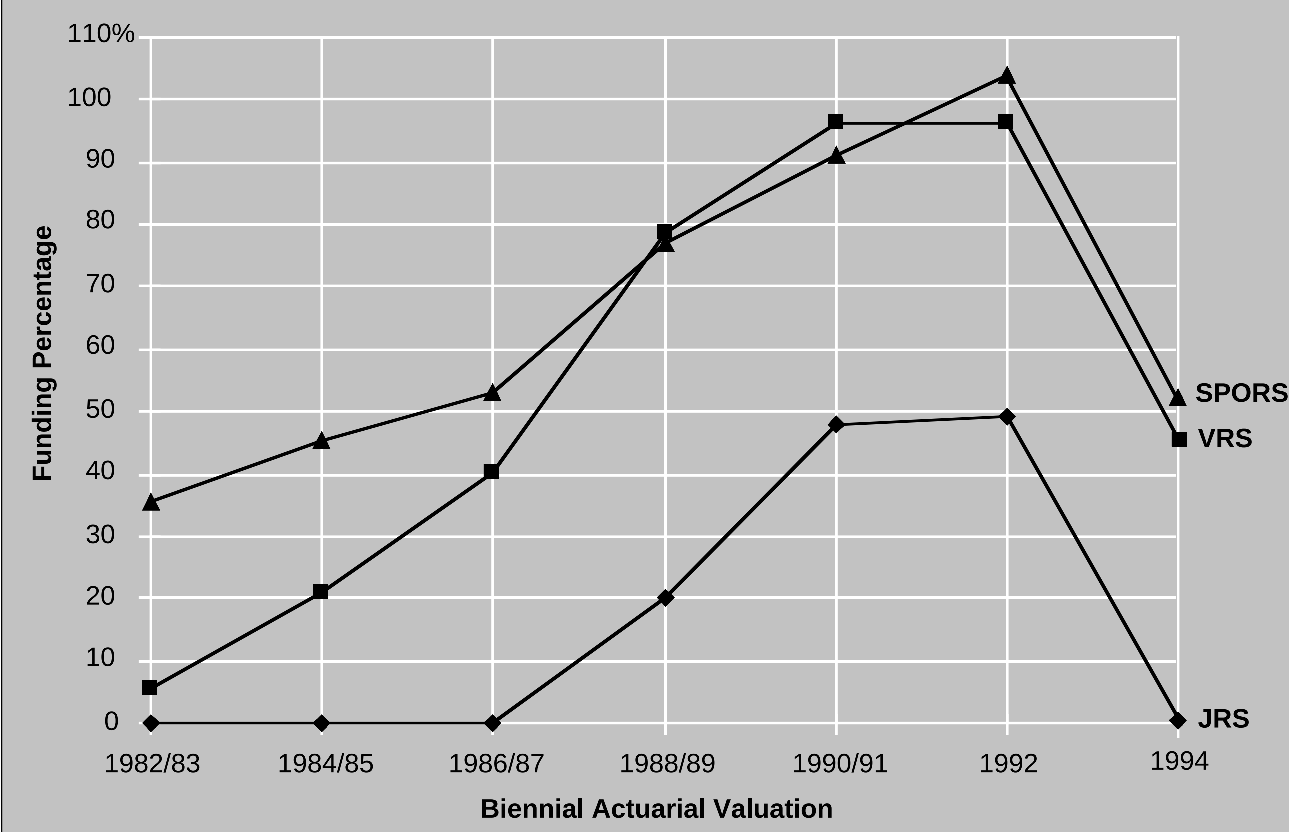
Source: JLARC staff analysis of information contained in June 30, 1994 actuarial valuation of VRS performed by Buck Consultants, Inc.

Pension-Related Financial Reporting Standards
Issued by the Governmental Accounting Standards Board

GASB Statement	Key Provisions Related to Pension Funding
Financial Reporting for Defined Benefit Pension Plans Statement No. 25 Effective Date: July 1, 1996 (FY 1997)	Annual required employer contribution (ARC) must be actuarially-determined in accordance with the following parameters: • Actuarial value of plan assets should be related to market value • Actuarial present value of total projected benefits should include all benefits to be provided, including cost-of-living-adjustments • Any generally-accepted actuarial cost method, including entry age normal, may be used • 40 year maximum amortization period for unfunded liability for the ten year period July 1, 1996 to July 1, 2006 • 30 year maximum amortization period for unfunded liability effective July 1, 2006 • Any significant decrease in unfunded liability resulting from a change in actuarial methods may be amortized over no less than ten years • Assumed rate of overall payroll growth must be based on an assumption of no growth in the number of system members Required schedule of ARC, and actual employer contributions, for six prior fiscal years
Accounting for Pensions by State and Local Government Employers Statement No. 27 Effective Date: July 1, 1997 (FY 1998)	Net Pension Obligation (NPO) equals cumulative difference between ARC and actual employer contributions for fiscal years 1988 to 1998 NPO must be recalculated annually based on difference between ARC and actual employer contributions NPO must be reported as a liability in State's general long term debt account group

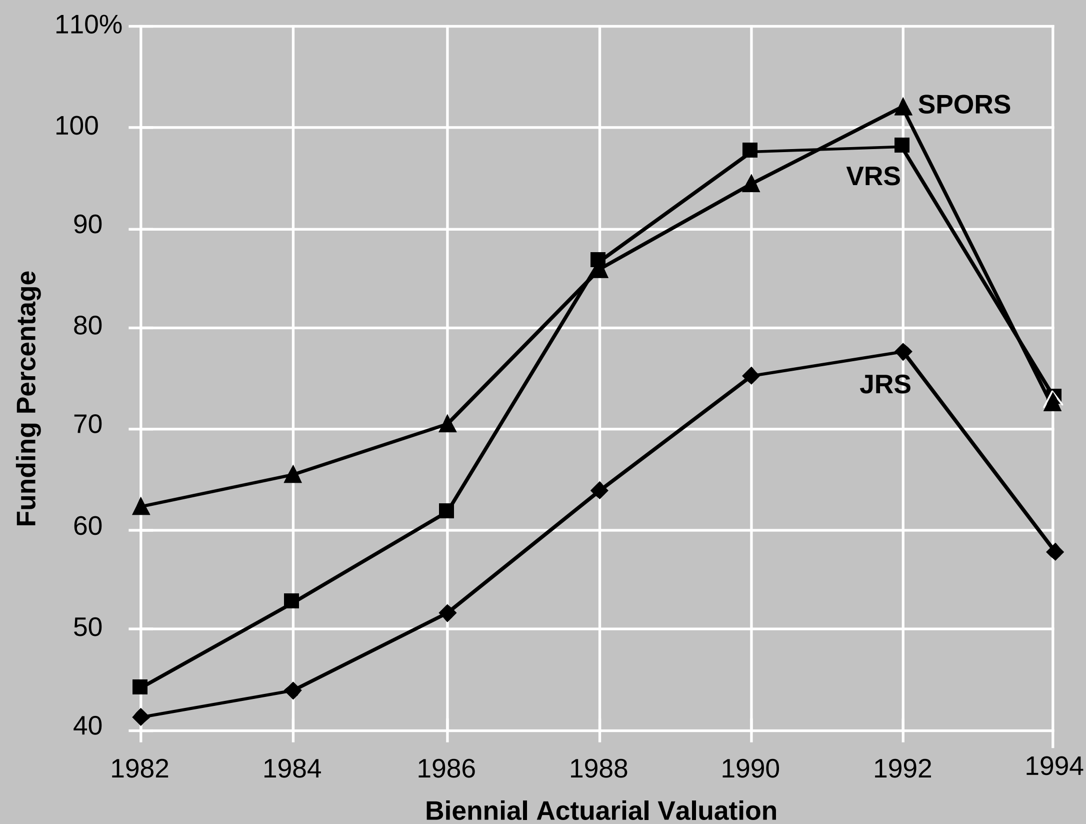
Source: JLARC staff review of Governmental Accounting Standards Board documents, and JLARC interviews with VRS staff.

Percent of Accrued Liabilities for Active Members (Employer Financed Contribution) Covered by Assets



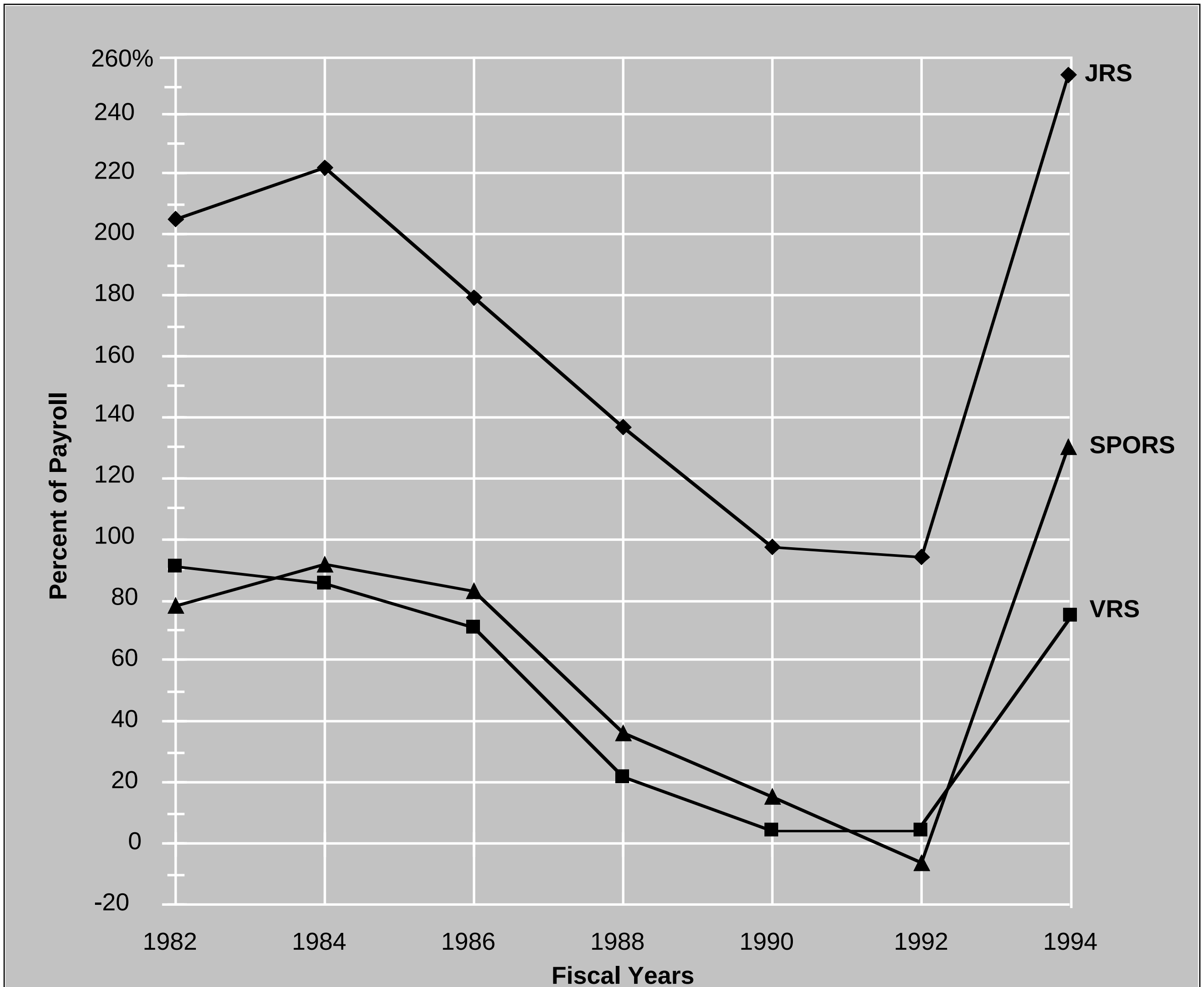
Source: JLARC staff analysis of VRS annual report and actuarial valuation data.

Valuation Assets as a Percentage of Actuarial Accrued Liabilities



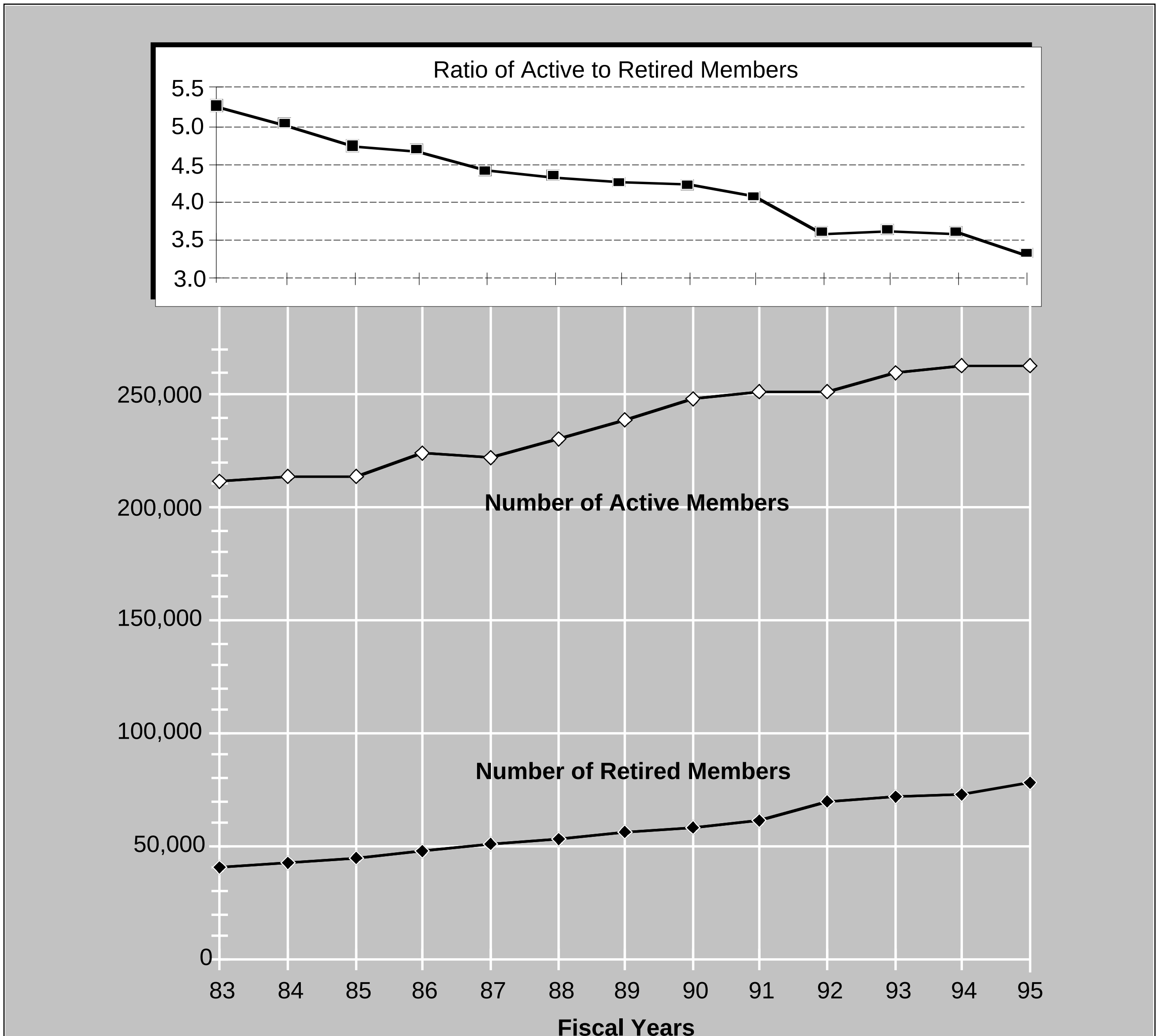
Source: JLARC staff analysis of VRS actuarial valuation data.

Unfunded Liability as a Percent of Payroll



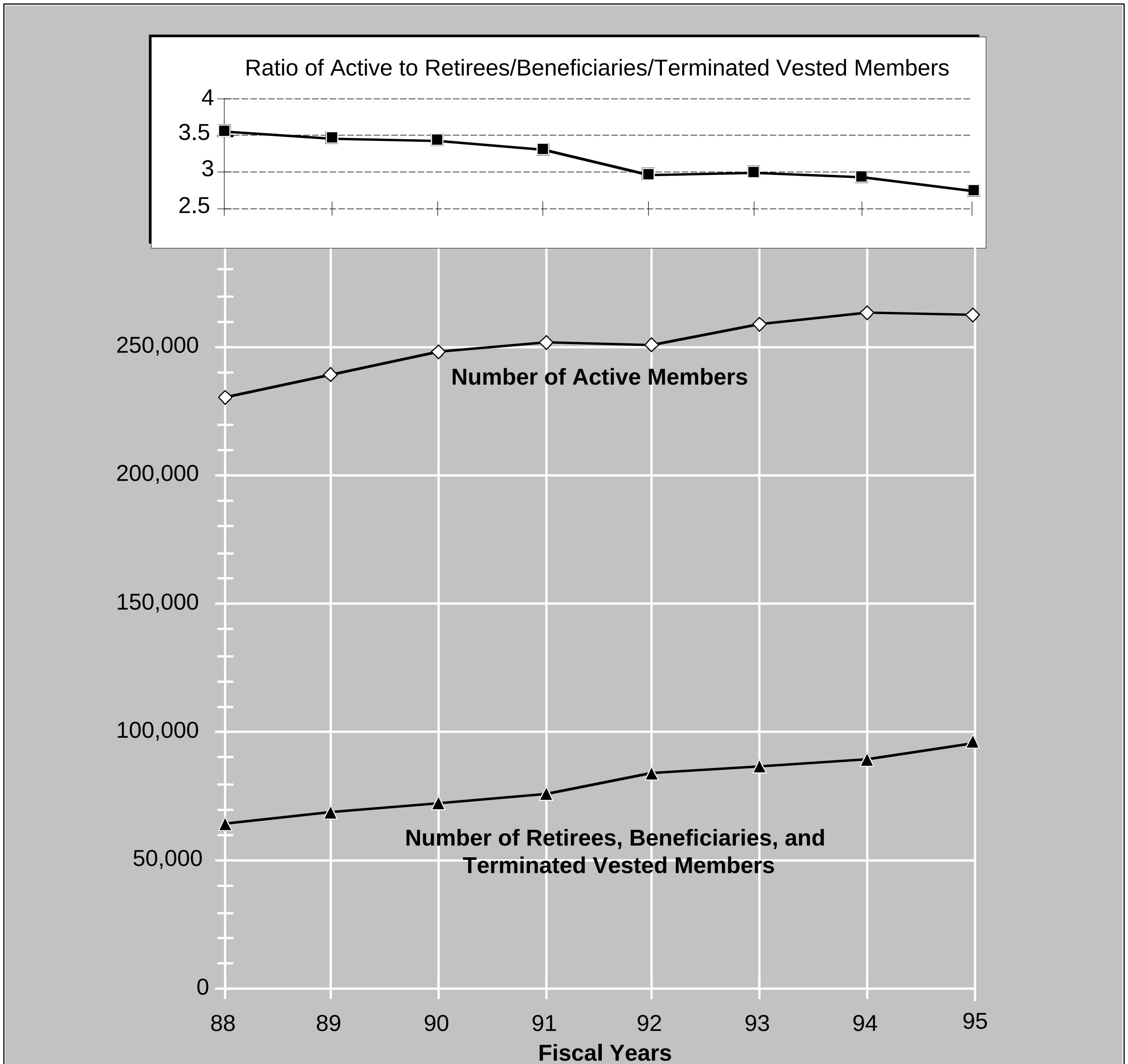
Source: JLARC staff analysis of VRS annual report and actuarial valuation data.

Trend in Active *vs.* Retired Members



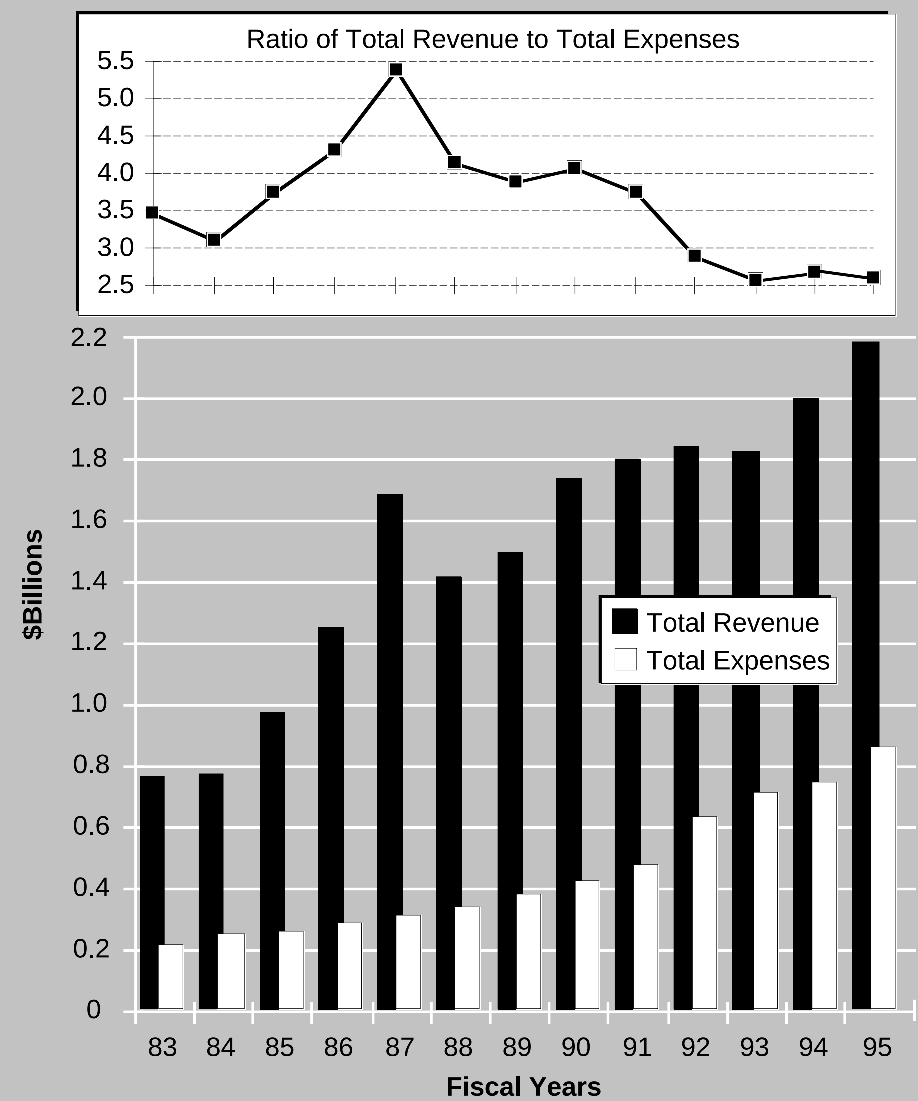
Source: JLARC staff analysis of VRS annual report data.

Trend in Active Members *vs.* Retirees, Beneficiaries and Terminated Vested Members



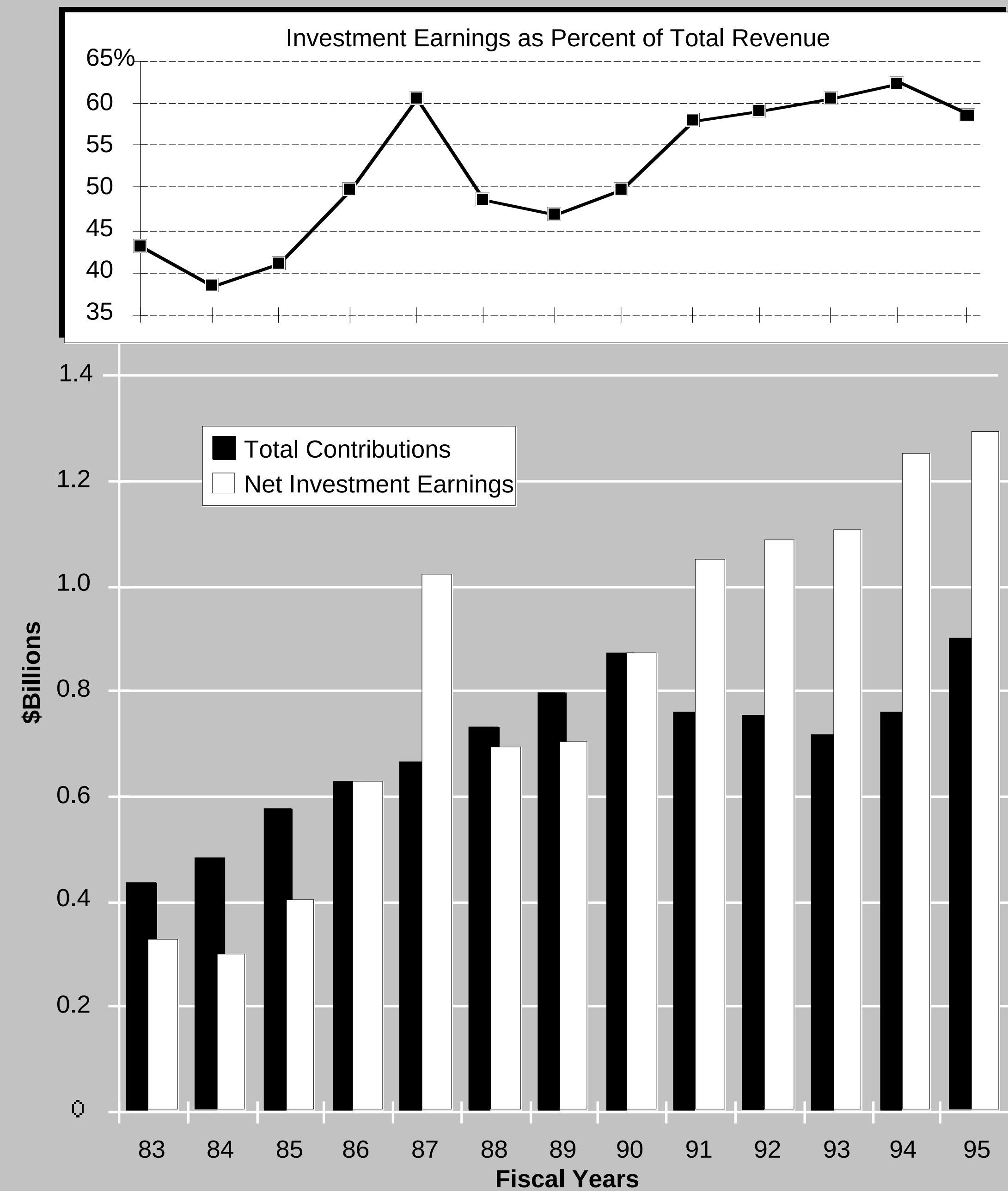
Source: JLARC staff analysis of VRS annual report data.

Comparison and Ratio of Pension Revenues to Expenses



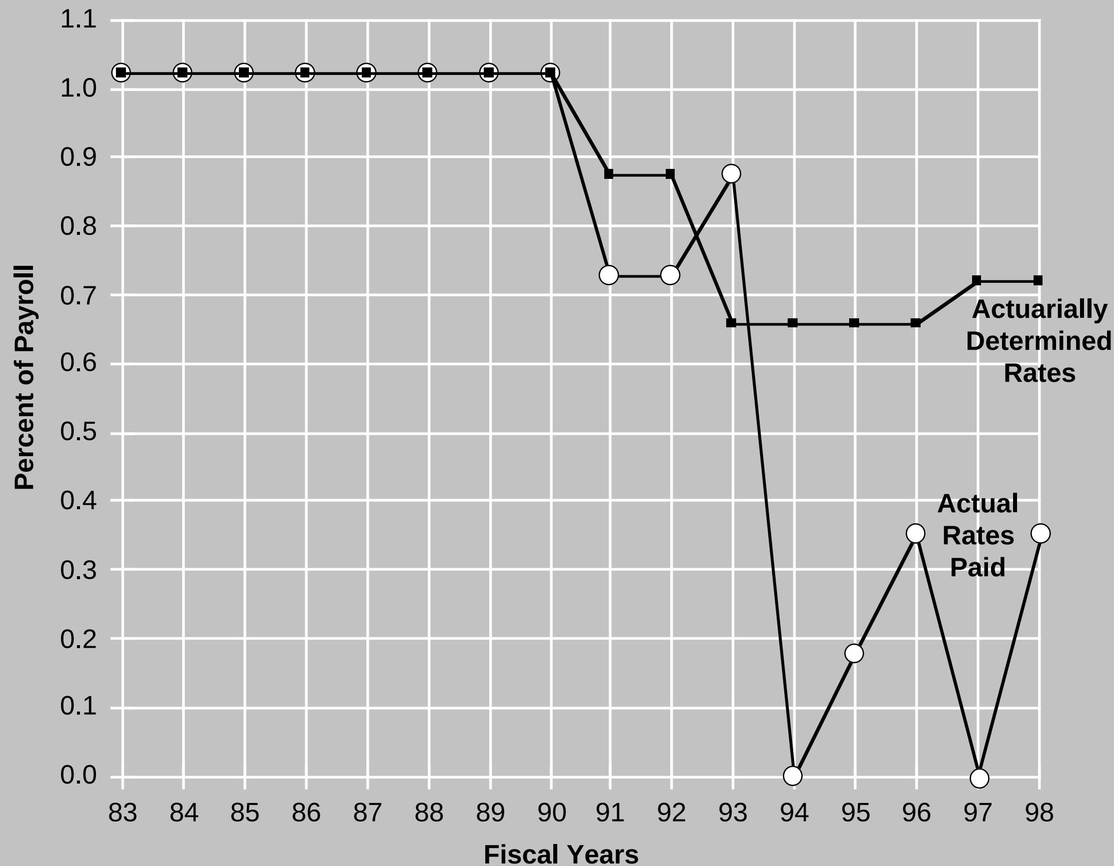
Source: JLARC staff analysis of VRS annual report data.

Comparison of Total Pension Contributions and Investment Earnings



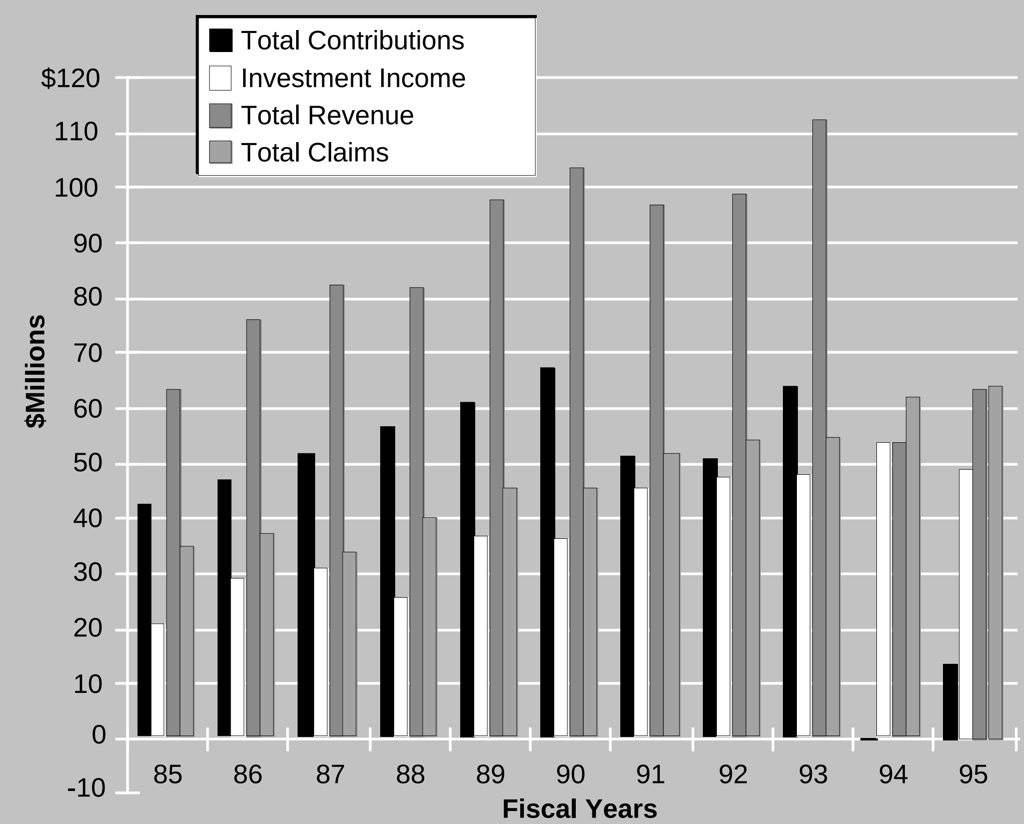
Source: JLARC staff analysis of VRS annual report data.

Group Life Insurance Contribution Rates



Source: JLARC staff analysis of VRS financial data.

Group Life Insurance Program Revenues and Claims Expenses



Source: JLARC staff analysis of VRS annual report data.

Contents of Part IV: Investments

Part IV: Investments

Contributions made by employers and employees are invested by VRS in order to generate additional revenue that is necessary to fund the cost of benefits. Investment income comprises the large majority of VRS revenue. Therefore, the investment program is a vital component of overall VRS operations.

The VRS Board of Trustees (the Board) is required by the *Code of Virginia* to invest the assets of the retirement system in accordance with the prudent expert standard. Investments shall be made "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity would use in the enterprise of a like character and with like aims." In order to assist the Board in fulfilling this responsibility, the *Code of Virginia* requires an Investment Advisory Committee (IAC) and a Real Estate Advisory Committee (REAC). Both advisory committees are required by statute to provide the Board with "sophisticated, objective, and prudent investment advice."

The *Code of Virginia* states that a chief investment officer (CIO) shall "direct, manage, and administer the investment department." Under the direction of the CIO, the professional staff in the VRS investment department operate and monitor the investment program on a day to day basis. The CIO and staff receive guidance, advice and feedback from the IAC and the REAC.

Most of the actual investment of the retirement system's assets is performed by external investment management firms hired by VRS. The majority of the VRS investment staff's time is devoted to implementing and maintaining the asset allocation policy established by the board; hiring, monitoring and terminating external investment managers; providing support to the Board, IAC, and REAC at their monthly meetings, and researching new investment opportunities. In addition, VRS investment staff are directly responsible for the actual investment of a small but growing percentage of VRS assets.

Section 30-78 of the *Code of Virginia* requires VRS to submit semi-annual investment reports to JLARC. The statute requires that the report include information concerning (I) planned or actual material changes in asset allocation, (ii) investment performance of all asset classes and sub-classes, and (iii) investment policies and programs. In practice, the investment reports are prepared by JLARC staff based on information obtained from the VRS investment department through a written request. Additional information for the report is developed by JLARC staff through attendance at the monthly meetings of the Board, IAC and REAC. The CIO does appear before JLARC to provide a briefing on the status of the investment program. The initial VRS investment report was presented to JLARC in January 1995.

This section includes the two most recent VRS investment reports prepared by JLARC staff to date. As the number of reports accumulate over time, members of the General Assembly may refer to this section in order to obtain an update, as well as a historical perspective, on the VRS investment program.

OVERSIGHT VRS Report

JOINT LEGISLATIVE AUDIT & REVIEW COMMISSION OF THE VIRGINIA GENERAL ASSEMBLY

The VRS Investment Program

Report Summary and Contents

The VRS Board of Trustees approved a revised asset allocation policy which increases equity and real estate investments, and reduces fixed income investments.

A comprehensive review of VRS investment policy has been initiated by the Board of Trustees.

VRS has experienced mixed results in terms of recent investment performance, with a total rate of return well below the actuarial investment return assumption of eight percent.

For the first time, the Board of Trustees has completed an analysis of long-term assets and liabilities. The findings support the current asset allocation policy.

The Virginia Retirement System maintains a sufficient level of cash to meet current and short-term future needs. However, VRS benefit expenses exceeded contributions for the first time in fiscal year 1994.

Profile: Virginia Retirement System Investments

Chief Investment Officer: Erwin H. Will
Total Assets: $16.6 billion
Actuarial Return Assumption: 8%
Number of VRS Investment Staff: 15
Current Number of Outside Managers: 70
Number of Active VRS Members: 263,071
Number of Retired VRS Members: 73,200

Total Return on Investments

(Most Recent Full Fiscal Years)			
1991	*1992*	*1993*	*1994*
6.4%	**11.2%**	**11.5%**	**1.7%**

(Time Periods Ending 12/31/94)			
10 years	*5 years*	*3 years*	*1 year*
11.6%	**7.2%**	**4.9%**	**0.0%**

Asset Allocation (as of December 31, 1994)

	Asset Allocation (% of Total Assets)		*Where Invested* (% of Asset Class)		*Investment Strategy* (% of Asset Class)	
Asset Class	**Target**	**Actual***	**Domestic**	**International**	**Active**	**Passive**
Equity	70%	56%	85%♦	15%	64%	36%
Fixed Income	21%	28%	91%	9%	100%	0%
Real Estate	9%	7%	100%	0%	70%∇	30%

*Of total assets, 1% was cash and 8% was tactical asset allocation. ♦Includes private equity. ∇Includes RF&P Corporation
Source: Virginia Retirement System.

The VRS Investment Program

INTRODUCTION

In response to legislation enacted by the 1994 General Assembly, the investment policies and procedures of the Virginia Retirement System (VRS) are in the process of intense review and substantial change. This process of examination and revision is ongoing, and many key policy decisions remain to be made. A complete evaluation of the effectiveness of the VRS investment program is premature at this time. However, a review of the issues affecting the investment program, and how those issues are being addressed, is appropriate.

The 1994 General Assembly made two significant statutory changes affecting the VRS investment program. First, the General Assembly eliminated the legal list of authorized investments, and established a new prudence standard for VRS investments. Under the new statutory provision, the VRS Board of Trustees (the Board) may make any investment provided that it is made "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."

Second, the General Assembly strengthened the required membership of the Investment Advisory Committee (IAC) and the Real Estate Advisory Committee (REAC). As a result of the new requirements, a greater level of investment expertise is now present on each committee. In addition, both of the advisory committees were made mandatory for the VRS Board. Each advisory committee is required to provide the Board with "sophisticated, objective, and prudent investment advice."

VRS is attempting to address many important and complex investment issues. Several major issues, particularly asset allocation and the relationship between VRS assets and long-term pension liabilities, have been largely resolved. But some other issues, especially concerning the strategies by which the new asset allocation will be implemented, have not yet been fully addressed. These issues have all been difficult to address, and should continue to require a significant amount of time and effort on the part of the VRS Board, its advisory committees, and the VRS staff.

Study Mandate

The Virginia Retirement System Oversight Act (Section 30-78 et seq. of the *Code of Virginia*) requires VRS to submit semi-annual and annual reports on its investment program to JLARC. The statute requires that the report be in a format approved by the Commission and that it include information concerning (i) planned or actual material changes in asset allocation, (ii) investment performance of all asset classes and sub-classes, and (iii) investment policies and programs.

Study Approach

This report was prepared based on information provided by VRS, in response to a proposal developed by JLARC staff for VRS investment reporting. JLARC staff defined the specific investment issues for VRS to address. These issues included asset allocation, investment policy and performance, long-term assets and liabilities, and short-term investments and liquidity. JLARC staff met with VRS staff to discuss the investment reporting proposal prior to the compilation of the requested information. This report is a summary of the investment information provided by VRS.

VRS OVERSIGHT 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.**

The Joint Legislative Audit & Review Commission
Suite 1100, General Assembly Building
Capitol Square, Richmond, Virginia 23219
(804) 786-1258 Fax: 371-0101

Report Organization

This report provides a summary update of the investment policies, procedures, and performance of VRS. The first section of the report examines asset allocation. The second section reviews other elements of the VRS investment policy. The third section discusses VRS investment performance. The fourth section presents a discussion of the relationship between VRS long-term assets and liabilities. The final section examines VRS short-term investments and liquidity.

ASSET ALLOCATION

Asset allocation is probably the most important investment policy decision made by the VRS Board. On average, 85 to 90 percent of total investment return may be controlled by the asset allocation decision. The VRS Board of Trustees, with the assistance of its advisory committees, is in the process of modifying the pension fund's investment policy and asset allocation.

Initially, the IAC worked with VRS staff and a consultant, J.P. Morgan, to develop an alternative asset allocation policy using an "asset-only" approach. Under this approach, pension fund risk is defined as the volatility of investment return. Based on this approach, an asset allocation recommendation was made to the Board. The Board voted to approve the recommended allocation (70 percent equity, 21 percent fixed income, and nine percent real estate) at its September, 1994 meeting.

However, at the request of the VRS Board, VRS staff and the IAC worked with Buck Consultants (Buck) on a different type of asset allocation study. In that study, Buck used an "asset/liability" approach, wherein pension fund risk is defined as the volatility of the VRS funding level and contribution requirements. Based on the results of the study, which was presented to the VRS Board at its December 1994 meeting, the Board reaffirmed the allocation previously determined using the asset-only approach. However, Buck recommended that the newly-approved VRS asset allocation be modified by increasing the pension fund's investment exposure to long-term bonds and international equities. This section describes the process used by VRS to develop its asset allocation policy.

"Asset-Only" Approach to Asset Allocation

Under this approach, which is prevalent in the pension industry, assumed rates of investment return, rate of return variance, and correlations between the returns of different asset classes are used to generate a number of possible asset allocations. A computer modeling program, known as an optimizer, uses these inputs to generate a number of asset allocation alternatives. Each of these possible allocations is efficient, meaning that the expected return is maximized given the corresponding amount of risk. Each potential allocation differs based on the amount of expected return and underlying risk. Using this type of approach, pension fund risk is defined as the variance in the expected rate of return. Typically, as the expected risk increases so does the return. These potential allocations serve as a starting point for further analysis.

While the alternative allocations which result from this approach are all efficient, they are not necessarily realistic for VRS. For example, preliminary results obtained for VRS included allocations that did not contain any U.S. equities, while also including large exposures to highly illiquid, rather expensive asset classes. Given this difficulty, VRS developed some realistic constraints for the optimizer model. For example, at least 25 percent of the VRS assets had to be invested in the domestic equity market, and at least ten percent of VRS assets had to be invested in fixed income instruments.

Capital Market Assumptions. The assumed rates of return, risk, and correlation used in the optimization process were developed based on information obtained from a number of sources. These included VRS consultants, as well as IAC members and VRS investment staff. Based on a consensus view, the IAC decided to use long-term equilibrium capital market assumptions developed by J.P. Morgan, with some minor revisions. The investment return and risk assumptions are summarized in Table 1.

Recommended Asset Allocation. Based upon the work done by VRS consultants and staff using the asset-only approach, the IAC recommended a revised asset allocation policy to the Board. This revised policy, which was approved by the Board in September 1994, made two significant changes. First, the percentage of assets to be invested in equities was substantially increased, while the percentage to be invested in fixed income instruments decreased substantially. Second, managed futures was eliminated as a distinct asset class. The allocation to real estate was increased to a lesser degree.

The expected return and risk of the new allocation policy is slightly higher than that of the prior policy. The allocation policy approved by the Board is based on an expected return of 11 percent and a standard deviation of 12 percent. This is higher than the 10.1 percent return and 11.1 percent standard deviation of the prior asset allocation policy. Figure 1 summarizes the revisions made to the VRS asset allocation policy.

Elimination of Managed Futures. As part of its overall review of VRS asset allocation, VRS eliminated managed futures as a separate asset class. This was

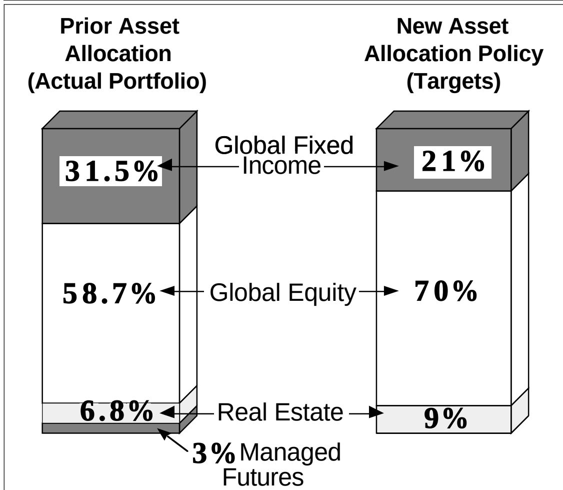
Table 1: VRS Asset Allocation Assumptions -- Investment Return and Risk

Asset Class	*Asset Sub-Class*	*Nominal Rate of Return (%)*	*Standard Deviation (%) of Rate of Return*
Equity	Domestic - Large Capitalization	10.55	16.0
	Domestic - Small Capitalization	12.11	20.0
	International - EAFE*	12.22	19.0
	International - Emerging Markets	15.02	25.0
Fixed Income	Domestic - U.S. Government/Corporate	7.02	7.5
	Domestic - High Yield	9.62	13.0
	International Bonds	7.33	12.8
Real Estate		7.80	15.0
Private Equity/Other		14.20	30.0

* Morgan Stanley European, Australian, and Far Eastern index.

Source: J.P. Morgan Equilibrium Capital Market Assumptions.

Figure 1: VRS Asset Allocation



Source: Virginia Retirement System.

done primarily in response to concerns about the relatively high costs and perceived risks that were believed to be associated with the program. The Board believed that these costs and perceived risks offset the potential for above-average rates of return. However, the Board did decide to continue to search for ways to include futures trading within the investment program in order to help realize its overall investment objectives.

"Asset/Liability" Approach to Asset Allocation

This type of approach identifies the mix of asset and sub-asset classes which best addresses a retirement system's projected liabilities and funding requirements. Forecasting techniques are employed to analyze the relationships between five variables: (1) funding ratio, (2) planning horizon, (3) contribution rate, (4) investment policy, and (5) confidence level. This type of approach to asset allocation, which integrates investment policy and funding policy, is new for VRS. Historically, investment policy and funding policy have been largely independent of one another. Prior to 1994 there had been little, if any, interraction between the VRS investment department and the VRS actuary. This analysis, which was the result of close collaboration between VRS investment staff and the VRS actuary, provides the VRS Board with information enabling it to answer the following type of question:

Given an asset allocation of A, what contribution rate is required over a period of B years in order to achieve a funding ratio of C with a probability of D percent?

The funding ratio used by Buck in its study for VRS is the market value of pension fund assets divided by the value of accumulated benefits. Under the asset/liability approach, this ratio serves as the financial goal for the pension fund. The planning horizon refers to the number of years required to achieve the financial goal. The contribution rate is expressed as a percentage of payroll. Investment policy refers to the allocation of plan assets among different asset classes. Finally, the confidence level is the likelihood that the stated result will actually be achieved.

In addition to serving as a decision-making tool for asset allocation, this type of analysis can also be used to help establish pension funding policy. In other words, how much money should be contributed to the pension fund, and when should the contributions be made? Traditionally, pension funding policy has been determined using actuarial valuation methods and assumptions, and amortization periods. However, forecasting techniques allow the plan sponsor to participate more directly in the policy setting process.

Definitions of Risk and Reward. An important feature of the asset/liability approach, which significantly differentiates it from the asset-only approach, is how the concepts of pension fund risk and reward are defined. Under the asset-only approach, risk is defined as variable investment performance as compared to the expected rate of return. The asset/liability approach, by contrast, defines risk as volatile funding ratios and contribution rates. The asset-only approach defines reward as expected investment return, while the asset/liability approach defines reward as expected increases in funding ratios and expected decreases in contributions.

The question of exactly how VRS pension fund risk should be defined is difficult to answer. There may not be any one single measure of risk for VRS. For example, pension fund risk could relate to the volatility of return, or to the volatility of funding status, or to the volatility of contribution rates. In practice, in order to design effective long-term investment policies designed to protect the pension fund and the interests of VRS members and beneficiaries, VRS needs to examine risks which extend beyond the mere volatility of expected return. The asset/liability study recently completed by Buck represents a positive step in that direction. The specific methods and the results of that study are discussed in detail later in this report.

INVESTMENT POLICY

The VRS Board is in the process of reviewing the overall investment policy of the pension fund. As part of the review, VRS prepared a draft investment policy statement. While the draft statement, as a whole, has not yet been approved by the Board, various policy elements contained within the document have been approved. Other elements, including the use of active and passive management strategies for various asset classes, have not yet been approved.

The draft policy statement includes a clear objective for the pension fund. "The overriding objective of the VRS is to help secure the Commonwealth of Virginia's obligation to pay pension benefits to qualifying employees." Moreover, "the assets of the VRS are to be invested in a prudent manner which is intended to provide for the anticipated growth of VRS's pension liability."

Asset allocation is an integral component of investment policy, but many other important policy elements have also been under review. These include the delegation of authority and responsibilities, performance objectives, manager strategy, and asset class guidelines. These elements all pertain to the manner and means by which VRS will implement its new asset-allocation policy over the long term. This section examines the elements of VRS investment policy that have been, and are continuing to be, examined by VRS.

Investment Responsibilities and Authority

The Board of Trustees, as the fiduciary of the fund, determines the appropriate investment policies to meet the fund's stated objectives and establishes guidelines under which the policies will be carried out. The IAC and the REAC determine the appropriate investment program structure, based on the recommendation of the investment department staff, in order to implement Board policies within established guidelines. VRS investment staff, under the direction of the chief investment officer (CIO), work closely with investment managers and consultants to implement the investment policy within the approved program structure.

The investment policy statement contains a proposal for allocating a number of responsibilities among the VRS Board, the IAC, and the CIO (Table 2). These responsibilities encompass the areas of policy and guidelines, program structure, manager strategy, consultants, and administration. The objective of this division of responsibilities is, to the greatest extent possible, to keep the Board focused on broad policy decisions as opposed to administrative micro-management.

VRS Advisory Committee Membership. Section 51.1-124.26 of the *Code of Virginia* specifies that the IAC and the REAC shall both have seven members. While the REAC has had seven members since the committee was reconstituted in March 1994, the IAC has had only six members during this period of time. The committee has discussed the need to obtain a seventh member, preferably an individual with a strong background in fixed income investments. However, no one as yet has been appointed to fill the vacancy. Having a seventh member is especially important since it is rare for all six IAC members to be present at each meeting. In eight IAC meetings held between June and December 1994, at least two committee members were absent during four of the meetings.

VRS Investment Staffing. Another source of potential difficulty is the amount of professional and support staffing within the VRS investment department. As of December 1, 1994, the VRS investment department had a total of 20 authorized positions, 15 of which are filled. The following positions are vacant:

- Managing Director,
- Senior Investment Officer,
- Investment Officer,
- Financial Analyst, and
- Office Manager.

Table 2: Proposed Allocation of VRS Investment Responsibilities

Responsibility	*Chief Investment Officer*	*Investment Advisory Committee*	*Board of Trustees*
Policy and Guidelines			
Approve Proposed Policy/Guidelines	Recommend	Recommend	Approve
Approve Long-Term Asset Allocation and Ranges	Recommend	Recommend	Approve
Approve New Asset Classes	Recommend	Recommend	Approve
Set Actuarial Investment Earnings Assumption			Approve
Program Structure			
Determine Target Allocation within Ranges	Recommend	Approve	Review
Approval of Proposed Structure	Recommend	Approve	Review
Rebalancing of Manager Allocations within Ranges	Approve	Review	Review
Manager Strategy			
Initiation and Development of Search	Recommend	Review	Review
Screenings and Interviews	Review		
Final Decision	Recommend	Approve	Review
Fee Negotiation	Approve	Review	Review
Ongoing Monitoring	Review		
Quarterly Performance	Review	Review	Review
Dismissals	Recommend	Approve	Review
Consultants			
Selection	Recommend	Approve	Review
Termination	Recommend	Approve	Review
Administration			
Hire Chief Investment Officer		Recommend	Approve
Soft Dollar Budget	Approve	Review	Review
Hire/Dismiss Custodian Bank	Approve	Review	Review

Note: In cases for which the Board chooses to delegate approval authority to the IAC, a monthly report shall be made to the Board summarizing all such approvals.
Source: Virginia Retirement System.

VRS is currently studying the staffing requirements for its investment department. VRS has hired a consultant, William M. Mercer, Inc., to assist in the review of the organization, staffing, and pay structure of the investment department. While this study is still in progress, Mercer's report indicates that VRS, having more than $16 billion in assets, should have a total of 21 investment staff.

Asset Allocation Implementation Strategies

The asset allocation policy approved by the VRS Board represents a set of long-term investment targets for the pension fund. Given the large amount of system assets, and the significant changes in asset allocation policy, these targets cannot be reached quickly. Historically, VRS has used a five-year plan to implement its asset allocation policy. This type of strategy enables VRS to smooth the growth of asset classes in light of expected and realized rates of return. This approach also enables VRS to take advantage of cost effective investment opportunities that may arise, such as manager terminations.

The IAC, with the assistance of VRS investment staff and consultants, is continuing to examine and discuss a wide variety of asset allocation implementation strategies. One of the key implementation recommendations that the IAC has made, and which the VRS Board approved in December 1994, is to decrease emphasis on the domestic U.S. equity market, while increasing emphasis on emerging and private equity markets. Other progress made to-date in this area of implementation includes establishment of asset allocation ranges around the long-term asset allocation targets. In addition, the IAC is reviewing the merits of active and passive investment strategies, as well as internal and external investment programs.

Asset and Sub-Asset Class Allocation Ranges. As previously mentioned, the VRS Board has adopted long-term asset allocation targets for global equity (70 percent), global fixed income (21 percent), and real estate (nine percent). In practice, actual asset allocation percentages will fall within a permissible range around a policy target. These ranges were approved by the VRS Board at its December 1994 meeting. Figure 2 summarizes the asset allocation ranges approved by the VRS Board.

Investment Performance Objectives. The primary performance objective for the VRS pension fund is to produce a rate of return in excess of the long-term policy return over rolling ten-year periods. The VRS long-term policy return is the cumulative sum of the allocation percentage of each asset class multiplied by its benchmark return. Performance objectives for active investment programs will be measured against the passive performance of their respective program benchmarks. Performance objectives for individual investment managers will be determined based on management style, such as active or passive management. The benchmarks for each asset class and subclass are as follows:

- Domestic Equity - Russell 3000 index return over rolling five year periods;
- International Equity (including emerging markets) - Morgan Stanley EAFE 50/50 index return over rolling five-year periods;
- Private Equity/Other - Russell 3000 index return plus 400 basis points over rolling ten year periods;
- Fixed Income - Lehman Brothers Aggregate Bond index return over rolling five-year periods; and
- Real Estate - Russell NCREIF index return.

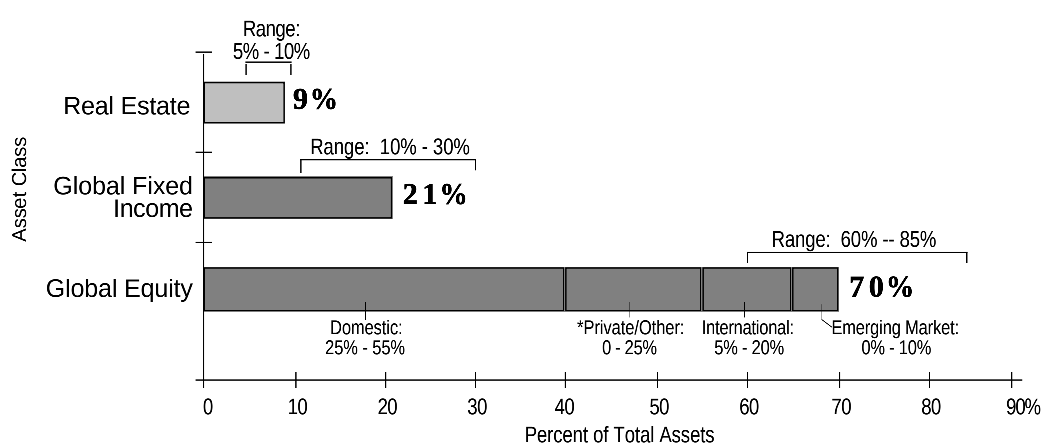
Investment Manager Strategy. The IAC has the responsibility to hire, fund, rebalance, and terminate managers across investment styles in order to provide diversification for the pension fund as a whole. These decisions are made with the assistance of VRS staff recommendations. Specific procedures for hiring, monitoring, and terminating investment managers vary slightly for each asset class. VRS staff is responsible for conducting the manager search, interviews and recommending managers for hire. The IAC makes the final hiring decision, subject to final contract and fee negotiations which are handled by staff.

VRS staff conducts ongoing monitoring and due diligence activities. This includes annual requests for information concerning changes in personnel, investment process, manager style, amount of assets under management, performance, and fee structure. VRS staff review manager performance with the IAC and the VRS Board on a quarterly basis. In addition, VRS staff conduct periodic on-site visits with each investment manager.

The IAC is responsible for the approval of investment manager terminations. This is done in response to the recommendation of VRS investment staff. Staff may recommend that a manager be terminated for a number of reasons, such as:

- changes in investment style not approved by VRS;

Figure 2: VRS Asset Allocation Ranges



*Private/other includes venture capital, buyouts, growth capital, subordinated debt, company turnarounds, and energy.
Source: Virginia Retirement System.

- failure to meet defined performance objectives over a reasonable time horizon;
- changes in personnel or ownership that might adversely affect the manager's ability to provide the required level of performance; or
- change in the manager's ability to handle the amount of assets committed.

Active and Passive Management. The IAC, with the assistance of VRS staff and consultants, is continuing to examine the active and passive investment strategies used by VRS, along with the relative strengths and weaknesses of each approach. Under active management, a manager's portfolio decisions are based on valuation and judgment, rather than on replicating an index. This type of strategy assumes that a manager can outperform a benchmark such as the S&P 500. Such a manager assumes that securities may be worth more or less than their current prices and actively tries to buy those undervalued securities and sell those overvalued securities. One particular type of active management strategy that is still under review is tactical asset allocation. This refers to investment strategies which dynamically allocate assets between two or more asset classes, typically equity, fixed income, and cash.

There are some difficulties associated with active management strategies. The ability to find, fund, and monitor successful active managers, given the amount of VRS assets to be committed to various asset classes, is limited by the size of VRS staff. Second, in order to have an impact on the total fund, the minimum asset commitment to an individual manager increases as total fund size increases. However, a manager's ability to add value often decreases as their total assets under management increase.

Passive management aims to achieve the return of the market within an asset class without attempting to search out mispriced securities. Indexation is one of the most widely used types of passive management. This type of strategy avoids any investment risk other than the risks of that market itself, thereby avoiding the costs of seeking information on possible excess returns. Once the portfolio is structured, there is theoretically no subsequent management other than rebalancing. Passive management strategies are characterized by relatively low fees.

A combination of active and passive management strategies allows VRS to take advantage of the positive elements of both. According to the IAC, VRS passive management should be limited, at present, to the domestic equity program. The IAC believes that the domestic equity program should maintain a minimum 50 percent passive exposure. Currently, this program has a 43 percent passive exposure. All other asset classes should be actively managed, due to the lack of viable passive investment alternatives. Such a strategy would pose a significant change for the international equity program, which currently has a 37 percent passive exposure. At its December 1994 meeting, the VRS Board approved a minimum 50 percent passive exposure for the domestic equity program. However, the Board has not yet taken formal action concerning approval of active and passive investment strategies for the other asset classes

Internal Asset Management. The vast majority of the $16.6 billion in VRS assets are managed externally by professional managers hired by VRS. However, approximately $917 million of VRS assets, or 5.5 percent of the total fund, are managed internally by VRS investment staff. Internally managed assets are limited to domestic equities. Three professional staff are responsible for the internal asset management function.

Five different investment strategies are currently used for internal asset management. Each strategy is distinctive in terms of its investment style (i.e. value or growth), capitalization range (i.e. large or small companies), and quantitative methodology. Internal asset management primarily uses active management strategies. Approximately 73 percent of the assets are managed actively, with only 27 percent managed passively.

According to VRS staff, there are several advantages to internal asset management. First, internal active management is less expensive than external active management. However, internal asset management expenses are still greater than those for passive management, at the current level of assets. Second, it is believed that internal asset management helps VRS to attract and maintain a strong professional staff. In addition, it increases the amount of in-house expertise available to analyze external investment managers and programs. It also provides VRS with a "window" to the financial markets and to the problems faced by external managers.

However, there are some potential problems associated with the internal asset management program. These include staff and salary competition with the private sector, and the need to structure the portfolio management process appropriately in order to ensure continued satisfactory performance in the event of staff turnover.

VRS staff have recommended to the IAC that VRS retain its internal management function. However, staff recommends that the internal asset management strategy be revised by combining three of the current active strategies into a single, more diversified portfolio. Under this revised portfolio, a greater emphasis would be placed on risk control in order to lower the volatility of returns. In addition, VRS staff recommend that internal asset management attain the same split between active and passive management that is ultimately used for the overall domestic equity program. The IAC adopted the staff recommendation, and presented the recommendation to the VRS Board. The Board approved the recommendation concerning continued internal asset management at its November 1994 meeting.

Use of Soft Dollars and Third-Party Brokerage. The total internal asset management budget is approximately $988,000. Approximately one-third of this amount is paid for with "soft dollars." Soft dollars refer to payments by VRS brokers, to vendors who provide support services used by the internal asset management group, from commission fees paid by VRS. This practice has been used by VRS for many years.

Most of the soft dollars used to purchase support services for internal asset management are paid using a third-party brokerage arrangement. Under this type of arrangement, the broker processes payments for services provided to VRS by a third-party vendor. However, there are some instances where the broker and the vendor are the same firm. In those instances third-party brokerage arrangements are not involved. Services purchased with soft dollars include econometric modeling, stock market data, and technical analysis. According to VRS, it has reduced the amount of its soft dollar budget by more than one third since March 1994.

In response to concerns expressed by the VRS Board concerning the use of third-party brokerage arrangements, VRS staff is acting to eliminate this practice internally. However, even after third-party brokerage arrangements are completely eliminated, commission dollars will continue to be used to purchase support services for internal asset management. However, this will occur only in situations where the broker and the vendor are the same entity. VRS intends to process eliminated soft dollar arrangements through the VRS budget.

INVESTMENT PERFORMANCE

VRS investment staff prepare a monthly investment performance report for the IAC and the VRS Board. This monthly report compares the investment rate of return for the total fund, and for each asset class, against established benchmarks. Total VRS investment return over the past year is far below the rate of return achieved over the past three and five year periods. VRS staff are in the process of designing a new quarterly reporting package that incorporates additional analytics and statistics that the staff examines as part of its ongoing monitoring of investment programs. This section provides a summary description of VRS investment performance. In addition, this section also reviews recent actions by VRS to reduce the number of its investment managers and consultants.

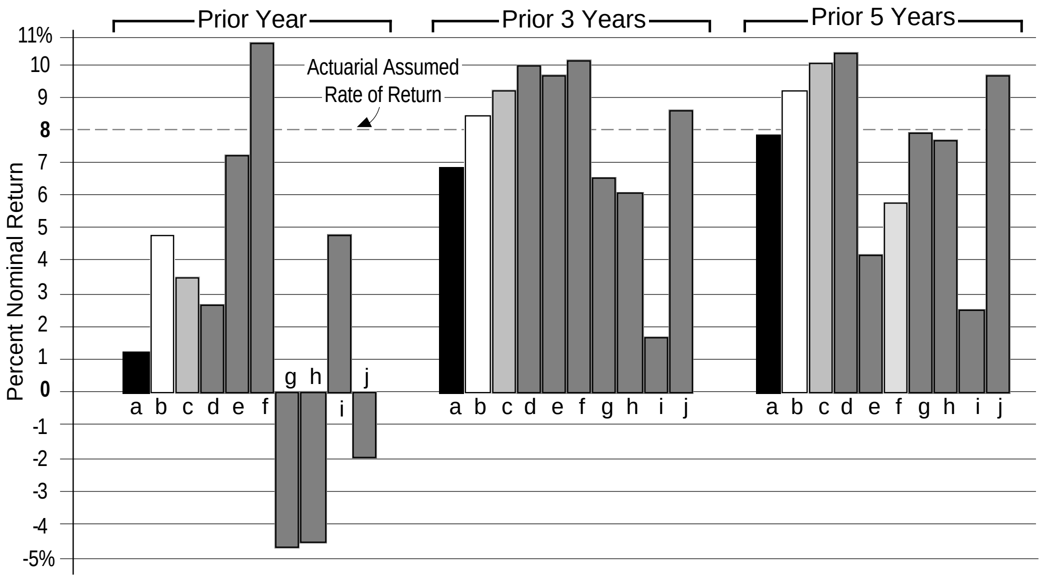
VRS Performance Reporting

The monthly performance summary prepared for the IAC and the Board compares the rates of return for the total fund, and for each broad asset class (i.e. domestic equity, international equity, and fixed income) against established benchmarks. Performance is measured over the following prior time periods: quarter, year-to-date, one year, three years, and five years. Performance data is reported at the sub-asset class and investment style levels. The current market value of each broad asset class is also reported. VRS has experienced mixed results in terms of investment performance relative to its established benchmarks. Figure 3 summarizes the investment performance of VRS assets against selected benchmarks for periods ending October 31, 1994.

VRS staff compiles this report using data provided by the Boston Safe Deposit and Trust Company, which serves as the VRS master custodian. The rates of return reported in the VRS investment performance summary are time-weighted, which is a pension industry standard for non-appraised assets. Returns for real estate, alternative investments and cash are included in total fund performance data but are not reported separately by VRS staff to the VRS Board. Rather, performance data for those three asset classes are reported by Callan Associates, Brinson Partners and the Virginia State Treasurer, respectively, each quarter. Callan Associates reports to the REAC, while Brinson Partners and the State Treasurer report to the IAC. The returns for real estate and alternative investments are calculated and reported to VRS on a dollar-weighted basis, which reflects the investment manager's discretion in controlling cash flow. Time-weighting and dollar-weighting methodologies typically produce different rates of return for any given asset class.

Real Estate Performance. VRS real estate investment performance has recently experienced significant improvement. Direct equity investments, made pursuant to the recommendations of REAC beginning in 1992, have been responsible for this significant turnaround. The policy decision to make direct equity investments was in response to a desire by VRS to have more decision-making control over its real estate portfolio. Other types of VRS real estate investments include pooled investments, and 50/50 partnerships with private insurance companies. Compared to direct equity investments, the degree of VRS control of these investments is relatively minimal. Overall, the rate of return for real estate investments has exceeded the program's performance benchmark, even when the assets of the RF&P Corporation are included. Figure 4

Figure 3: VRS Time-Weighted Investment Performance for Periods Ending October 31, 1994



KEY:

a = Total Fund Performance
b = Total Equity
c = Domestic Equity
d = Russell 3000 (domestic equity benchmark)
e = International Equity
f = EAFE 50/50 (international equity benchmark)
g = Fixed Income
h = Lehman Aggregate Bond Index (fixed income benchmark)
i = Real Estate / Alternative Investments / Cash
j = Tactical Asset Allocation

Source: Virginia Retirement System Performance Summary for Periods Ending October 31, 1994.

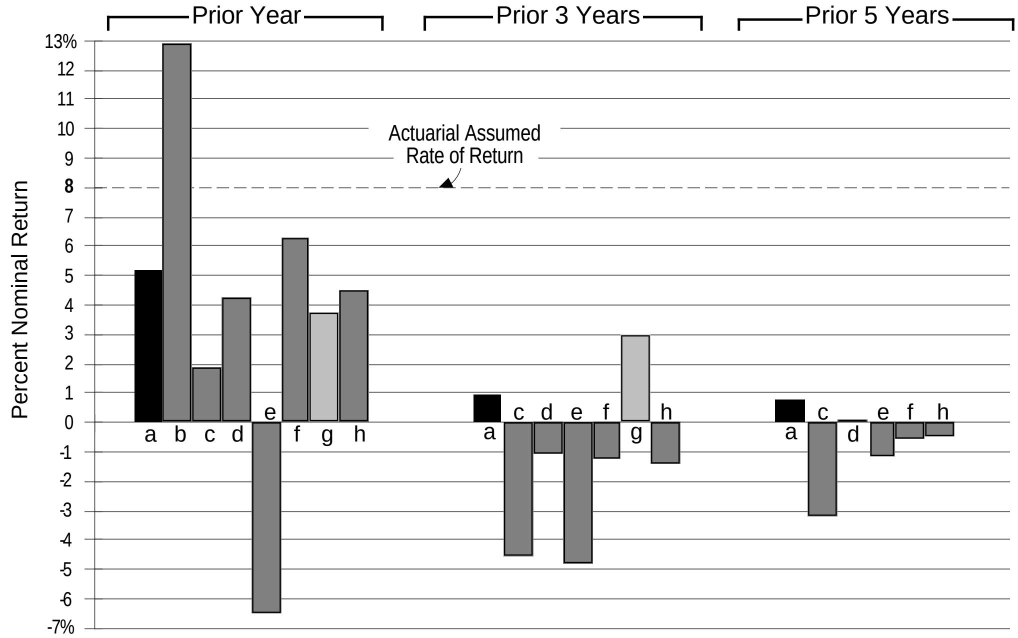
(page 11) provides a summary of real estate investment performance for the quarter ending September 30, 1994.

Alternative Investment/Private Equity Performance. The vast majority of these alternative investments are direct equity investments in privately-owned companies. Private equity investments are diversified across various niches. These include early and later stage venture capital, leveraged buyouts and growth capital, subordinated debt, company turnarounds, and energy.

Some of these investment niches warrant brief description. A leveraged buyout is the takeover of a company using borrowed funds. Most often, the target company's assets serve as security for the loans taken out by the acquiring firm, which repays the loans out of the cash flow of the acquired company. Turnaround investing may involve acquiring control of a potentially promising business which is experiencing financial or operating difficulties, and selling at favorable prices. Turnaround investing can also involve purchasing a portfolio of company securities, most of which are often already in bankruptcy. This type of investment anticipates that the portfolio value should increase as a result of the company reorganization process. In either type of turnaround investment, the investor's objective is to sell the revamped company at a higher price. Energy involves all stages of the energy cycle including the exploration, development and manufacturing of energy products.

The majority of the private equity investments are made by VRS as a limited partner through general partnerships. The remainder of the investments are through direct co-investments alongside general partners. Brinson Partners, Inc., serves as investment advisor to VRS, and provides VRS with a quarterly report of investment performance. The performance statistics are calculated on a dollar-weighted basis. VRS made its initial partnership investments in 1989, and as of June 30, 1994 has obtained a cumulative, annualized net return of 10.02 percent. The initial direct co-investments were made in 1992. VRS has received a cumulative net return of 7.30 percent on its direct investments since 1992. VRS estimates that the overall return for the private equity program is ten percent.

Figure 4: VRS Real Estate Investment Performance



KEY:

a = Total VRS Real Estate Portfolio
b = Direct Equity
c = Pooled
d = Shared 50/50
e = Other
f = Total REAC Real Estate Investments
g = RF&P Corporation
h = NCREIF Index (real estate benchmark)

Note: Direct equity was not applicable for prior 3 and 5 years because direct equity investments were first made in 1992; RF&P was not applicable for prior 5 years because RF&P was purchased in 1991.

Source: Real Estate Performance Report for Quarter Ending September 30, 1994 prepared by Callan Associates, Inc. for the Virginia Retirement System.

Investment Manager and Consultant Hirings and Terminations

Since July 1, 1993, VRS has terminated 22 manager relationships. Terminations have occurred for a number of reasons, such as:

- the manager's inability to perform in accordance with a stated objective;
- VRS lost faith in the manager's ability to maintain its performance objective in the future;
- the VRS Board decided to eliminate a specific investment program; and
- the manager or firm ceased to exist.

Since FY 1994, VRS has terminated two investment consulting relationships. Lewis Bailey was terminated because VRS determined that a different consultant, Brinson Partners, could provide the same quality of service at a lower cost. Rogers Casey was terminated as a general pension fund consultant. VRS determined that it was more cost effective to hire investment consultants on a project-specific basis rather than keeping a single general consultant on a retainer basis.

Overall, VRS has reduced its number of managers and consultants by 12 percent since July 1993. Table 3 summarizes recent decisions made by VRS to hire and terminate investment managers and consultants.

LONG-TERM ASSETS AND LIABILITIES

As part of its overall review of asset allocation and investment policy, the VRS Board is attempting to ensure that its investment program effectively provides for the anticipated growth in pension benefit liability. This desire on the part of the Board is reflected in the draft VRS investment policy statement. According to the draft, "investment of the fund is structured to provide reasonable assurance as to the security of the re-

Table 3: VRS Investment Manager and Consultant Hirings and Terminations -- July 1, 1993 to December 1, 1994

Asset Class	*Number of Managers/ Consultants (7/1/93)*	*Number Hired*	*Number Terminated*	*Number of Managers/ Consultants (12/1/94)*
Equity (totals)	71	8	12	67
Domestic	43	3	11	35
International	9	2	1	10
Emerging Markets	0	0	0	0
Private Equity/Other	19	3	0	22
Fixed Income	13	1	3	11
Real Estate	11	1	1	11
Managed Futures	6	0	6	0
Consultants	4	0	2	2
TOTALS	105	10	24	91*

Source: Virginia Retirement System. *Reduced to 70 by 1/30/95.

tirement benefits." The policy statement further provides that "the assets of the VRS are to be invested in a prudent manner which is intended to provide for the anticipated growth of VRS' pension liability."

As part of the Board's effort in this area, Buck Consultants performed a special study of VRS long-term assets and liabilities. One of the study's objectives was to determine how the VRS asset allocation should be configured to best enable VRS to address its projected long-term pension liabilities. As previously stated, Buck performed its asset allocation anlaysis using an asset/liability approach, as opposed to an asset-only approach.

The asset/liability approach aims to alleviate some perceived weaknesses of the asset-only approach. In particular, the asset/liability approach recognizes that there are some common causes, such as interest rate sensitivity, to the value of both assets and liabilities. For example, while decreases in interest rates may have a positive effect on the value of certain assets, the present value of pension liabilities also increases as interest rates decline. According to Buck Consultants, implicit within the asset/liability approach is the recognition that pension fund liabilities may act as a good hedge against risk in investment return. This section discusses the issues addressed in the Buck study, and summarizes the results of the study as well as the recommendations made to the VRS Board.

Buck Evaluated Seven Potential VRS Asset Allocations

The Buck study examined the relationship between VRS asset allocation and pension funding, over 5-, 15-, and 25-year time horizons, for State employees and teachers. Projections of funding status and contribution rates were made, using both favorable and unfavorable investment environments, for seven different asset allocations (Table 4). These allocations included the current actual VRS portfolio (Portfolio I), as well as the new asset allocation policy approved by the VRS Board (Portfolio II). In addition, the following five alternative allocations were analyzed:

- Portfolio III: Same as portfolio I, except all fixed income assets are long-term bonds;
- Portfolio IV: Same as portfolio I, except international equity exposure is increased to 50 percent of total equity;
- Portfolio V: Same as portfolio I, except equity allocation increased to 85 percent of total assets by adding small capitalization equity;
- Portfolio VI: Same as portfolio II, except equity allocation increased to 85 percent of total assets by adding small capitalization equity; and
- Portfolio VII: Same as portfolio VI, except for larger international equity and long-term bond allocations.

In the study, VRS contribution rates were compared among the alternative investment portfolios, while holding constant the target funding ratio, confidence level, and planning horizon. VRS funding ratio was defined as the market value of pension fund assets divided by the value of the VRS accumulated benefit obligation (ABO). ABO is a measure of the present value of pension benefit liability, which is calculated based on an individuals salary and service credit at the time of the valuation. Buck calculated ABO to include

Table 4: Alternative VRS Asset Allocations Evaluated in Buck Consultants' Study

	Allocations Modeled (% of Each Asset Class)						
Portfolio →	I	II	III	IV	V	VI	VII
Asset Class							
Intermediate Term Bonds	26.0	14.9	0.0	26.0	8.0	8.0	0.0
Long Term Bonds	5.3	3.1	34.0	5.0	2.0	2.0	10.0
Large Cap Stocks	34.3	28.0	34.0	20.0	36.0	26.0	17.5
Small Cap Stocks	12.7	12.0	13.0	8.0	31.0	26.0	17.5
International Equity	8.1	10.0	8.0	27.0	13.0	13.0	30.0
International Bonds	2.5	3.0	0.0	3.0	0.0	0.0	0.0
Private Equity	4.0	15.0	4.0	4.0	5.0	15.0	15.0
Real Estate	7.1	9.0	7.0	7.0	5.0	5.0	5.0
Emerging Markets	0.0	5.0	0.0	0.0	0.0	5.0	5.0

Source: *Virginia Retirement System, 1994 Investment Policy Study*, prepared by Buck Consultants.

anticipated cost-of-living adjustments (COLAs), on a pre-funded basis. By way of contrast, the projected benefit obligation (PBO) is a measure of the present value of pension liability which is calculated based on the amount of service credit at the time of the valuation date, while also reflecting assumed future salary increases.

Study Assumptions. In preparing its forecasts of funding ratios and contribution rates, Buck made several key assumptions. First, the State employee and teacher workforce was assumed to grow at an annual rate of one percent for ten years, with the workforce remaining stable thereafter. Employee payroll was projected to increase consistently with the underlying inflation projections, which averaged a compound rate of 4.4 percent over the forecast period. The investment risk and return assumptions used by J.P. Morgan during its VRS asset allocation study were also used by Buck.

Aggressive Investment Policy Requires Less Contributions Over Long Term

As previously stated, the Buck study examined the effect of alternative asset allocations on VRS funding status and contribution rates. In its report, Buck suggested that VRS pay particular attention to the 50th percentile results (i.e. a 50 percent probability) of achieving a funding status of 120 percent over a 25-year time horizon, and the 90th percentile results (i.e. a 90 percent probability) of achieving a 100 percent funding status over a five-year time period.

Regardless of the asset allocation or the target funding ratio, a 90th percentile result will always require a greater contribution than a 50th percentile result. That is because the 90th percentile contribution rate result in effect presumes that actual investment performance of the asset allocation has been much lower than expected. The 50th percentile contribution rate, by contrast, effectively presumes that actual investment performance of the asset allocation has been the same as expected.

There is a tradeoff between reduced contribution rates that may be achieved over the long-term by reallocating assets, and a potential increase in contribution requirements in the short-term if investment experience is poor. Buck concluded that over the long-term a more aggressive VRS investment policy, such as that reflected by the VRS Board's new asset allocation policy, will require less contributions to meet long-term funding goals than would be required by maintaining the current actual asset allocation. Table 5 provides a summary of the results of Buck's forecast for a 25-year time horizon.

However, over a short five-year time horizon, such an aggressive investment program could result in modest increases in required contributions over that required with the current actual portfolio, due to the possibility of lower than expected investment performance. Table 6 summarizes the results of Buck's analysis concerning the difference in required contribution rates between the current actual VRS asset allocation, and the new asset allocation policy approved by the VRS Board.

Increased Exposure to Long-Term Bonds and International Equity Recommended

In order to further improve the asset allocation already approved by the VRS Board, Buck strongly recommends that VRS consider increasing the duration of its fixed income portfolio to that of a long-term bond portfolio. Currently, the VRS target allocation for fixed income is equally weighted between short, intermediate, and long-term bonds. In the aggregate, VRS fixed income investments currently have a market duration of only about five years. In addition, Buck recommended that VRS increase the international component of its equity allocation.

Based on the results of the Buck study, the IAC recommended that the asset allocation policy approved by the Board in September 1994 (70 percent global equity, 21 percent fixed income, and nine percent real

Table 5: Effect of Alternative VRS Asset Allocations on Contribution Rates Over a 25-Year Period

	Required Contribution Rate (%) for **State Employees**				Required Contribution Rate (%) for **Teachers**			
	Funding Status / ConfidenceLevel				Funding Status / Confidence Level			
Portfolio	100 / 50	100 / 90	120 / 50	120 / 90	100 / 50	100 / 90	120 / 50	120 / 90
I	8.30	15.31	9.69	17.19	10.08	18.58	11.80	21.42
II	6.10	13.93	7.26	15.79	7.26	17.29	8.74	19.75
III	7.97	14.64	9.29	16.66	9.48	18.04	11.14	20.41
IV	7.86	14.51	9.22	16.52	9.59	17.64	11.23	20.25
V	6.43	15.41	7.67	17.43	7.87	19.09	9.22	21.81
VI	5.16	14.22	6.41	16.28	6.44	17.77	7.76	19.91
VII	4.50	12.42	5.53	14.42	5.56	15.58	6.90	17.86

Note: Contribution rates are the sum of required employer and employee rates. Required employee rate assumed to be five percent for State employees and four percent for teachers.
Source: *Virginia Retirement System, 1994 Investment Policy Study*, prepared by Buck Consultants.

Table 6: Effect of Current and New VRS Asset Allocations on Contribution Rates Over a 5-Year Period

Required Contribution Rate(%) for ***State Employees***		*Required Contribution Rate (%) for* ***Teachers***	
Current Actual Allocation	*New Allocation Policy*	*Current Actual Allocation*	*New Allocation Policy*
18.0	18.1	25.1	25.5

Note: Required contribution rates estimated to ensure a 90 percent chance of attaining 100 percent funding status within a five-year period.
Source: *Virginia Retirement System, 1994 Investment Policy Study,* prepared by Buck Consultants.

estate) be reaffirmed. The IAC also recommended that its commitments to the sub-asset classes (i.e. 40 percent domestic equity, 10 percent international equity, 15 percent private equity/other, and 5 percent emerging markets) also be reaffirmed by the Board. The VRS Board approved this recommendation at its December 1994 meeting. In addition, the IAC recommended that VRS staff study the issues involving increased exposures to long-term bonds and international equity, and provide a recommendation within 60 days. That study is currently in progress.

SHORT-TERM INVESTMENTS AND LIQUIDITY

The Virginia Retirement System maintains a sufficient level of cash to meet its current and short-term needs. This cash is invested in various short-term instruments by both the Treasurer of Virginia and Mellon Trust. Each quarter VRS prepares a forecast of all anticipated cash inflows and outflows for the next twelve months. During FY1994, for the first time, VRS benefit expenses were greater than employer and employee contributions.

VRS estimates that the difference between benefit expenses and contributions will continue to increase, reaching $133 million by fiscal year 1998. As a result, investment income will be needed to pay an increasingly larger share of VRS benefit expenses. This section examines the VRS short-term investment program, and how that program is used to help maintain the necessary level of liquidity within the pension fund.

Short-Term Investment Program

Sufficient cash is maintained with the Treasurer of Virginia (Treasurer) to cover the VRS retiree payroll, refunds to members, administrative expenses, insurance premiums and claims, and retiree health care credits. Cash necessary to meet the short-term obligations of VRS investment operations is maintained with Mellon Trust (Mellon). Examples of such investment obligations include drawdowns by private equity and real estate managers, and fundings of new programs. Derivatives are not included as eligible investments by either the Treasurer or Mellon. VRS anticipates that less than one percent of pension fund assets will be held by the Treasurer or Mellon at any point in time.

Treasurer of Virginia. VRS deposits pension and group life insurance contributions into a short-term investment account (STIA) held by the Treasurer. The STIA is the balance in unallocated cash which VRS does not require for its day-to-day operating needs, and which has not yet been committed to a specific manager or asset class. On a daily basis, the Treasurer monitors the cash needs of VRS and invests any excess cash left in the account in eligible short-term investments. During the month of November, 1994, the average invested balance was approximately $60 million. The investment yield during November was 5.34 percent.

There are three investment objectives for the STIA. First, it should assure the safety and repayment of principal. Second, it should provide needed liquidity, on a daily basis if necessary. Third, it should generate a rolling 90 day return in excess of the return on the 91-day U.S. Treasury Bill. In addition, the STIA return should at least equal the net return provided by the Mellon Trust short-term investment fund.

The STIA is invested in accordance with guidelines established by the VRS Board. The guidelines address the issues of maturity, liquidity, and credit quality for the purpose of avoiding undue credit or interest rate risk. The average maturity target range of STIA is between 15 and 50 days. Maturities generally cannot exceed one year. Eligible short-term investments include:

- certificates of deposit of domestic and foreign banks;
- bankers acceptance of domestic and foreign banks;
- commercial paper;
- treasury, federal agency securities, and U.S. government guaranteed securities;
- repurchase agreements; and
- other debt instruments such as corporate notes and bonds.

According to VRS, it is highly unlikely that it would ever need all or even a large portion of the funds in the STIA at any one time. Nevertheless, 25 percent of the funds are required to be available on 30 days' notice from VRS. Furthermore, 50 percent of the funds must be available on 60 days' notice, with zero market value adjustment.

Mellon Trust. If VRS accumulates excess cash with the Treasurer, the excess is transferred to the Mellon short-term investment fund (STIF). Designed specifically for the cash management needs of employee benefit trusts, the STIF serves as an investment vehicle for very short-term funds or reserves. The STIF is managed to provide no investment risk, maximum liquidity, and a reasonable competitive return. VRS estimates that, on average, less than $100 million of its assets will be held in the STIF at any one time. VRS assets invested in the STIF earned a 3.7 percent rate of return during the twelve months ending October 31, 1994.

The STIF is invested in prime grade securities of very short maturities, with an average maturity schedule of approximately 46 days. Types of investments include repurchase agreements backed by the U.S. government, guaranteed collateral, high grade commercial paper, certificates of deposit, bankers' acceptances, and U.S. treasury and government agency short-term obligations. Mellon charges VRS a management fee equivalent to 12 basis points charged against the gross yield.

VRS Cash Forecast and Liquidity

Each quarter VRS prepares a forecast of all anticipated cash inflows and outflows for the next 12 months. A portion of the overall forecast, which pertains specifically to the Treasurer's short-term investment account, is an estimate of net "new money." Net new money includes the difference between anticipated VRS contributions and expenses. This portion of the overall cash forecast is used to help foresee cash excesses and shortages in the Treasurer's account.

In addition to the estimate of net new money, the VRS cash forecast includes all other anticipated cash flows that affect its cash balance. However, the forecast does not consider cash flows of VRS public equity and fixed income managers since these managers are presently allowed to maintain or re-invest any cash they may generate through the sale of assets or receipt of dividend or interest income.

Prior to the beginning of each quarter, VRS raises cash to meet its estimated needs for the quarter. Cash is raised by selling assets such as equities or fixed income instruments, or by requiring public equity or fixed income managers to transfer a portion of their dividend and interest income back to the pension fund. If any assets are to be liquidated, the decision regarding which asset class or classes to liquidate depends on target allocation amounts.

Analysis of Net New Money. VRS expects that pension fund expenditures will exceed contributions by $105 million during the period October 1, 1994 through September 30, 1995. Therefore, the amount of net new money will be negative. According to VRS, $69.1 million of the anticipated negative net contribution is due to State-mandated reductions in actuarially-determined contribution rates for pension and life insurance benefits. The remainder is primarily attributable to increases in pension benefit expenses.

This current estimate of the net contribution represents a worsening of the estimate from just three months prior, when a negative net contribution of $86.3 million was forecast. As a point of comparison, VRS net new money was consistently positive from 1988 to 1992, averaging approximately $325 million. Table 7 summarizes the VRS analysis of expected net new money. VRS estimates that the amount of its negative contribution will continue to increase, reaching $133 million by FY 1998 (Figure 5).

Table 7: Expected VRS Contributions and Expenditures -- October 1, 1994 to September 30, 1995

Contributions	Amount
Teachers	$370,100,000
State Employees	$238,000,000
Political Subdivision Employees	$162,200,000
Judges	$10,700,000
State Police	$7,700,000
Retiree Health Care Credit	$18,900,000
Group Life Insurance	$14,300,000
Total Contributions	$821,900,000
Expenditures	
Annuities	$773,000,000
Refunds	$ 68,400,000
Insurance Premiums & Claims	$ 60,000,000
Administrative	$ 13,200,000
Retiree Health Care Credits	$ 13,200,000
Total Expenditures	$927,800,000
Net New Money	$(105,900,000)

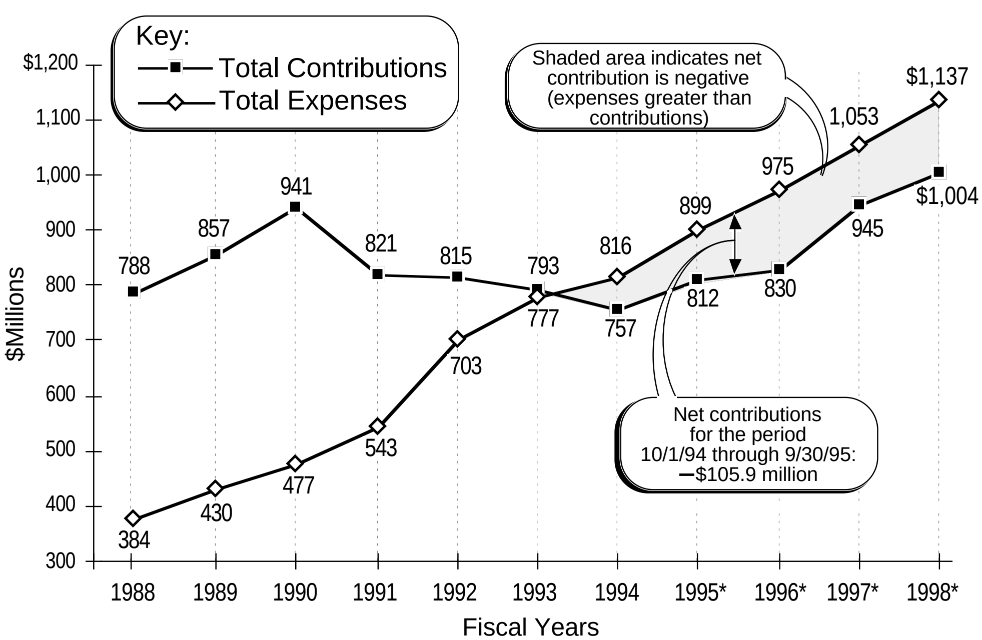
Source: Virginia Retirement System.

CONCLUSION

During 1994, the VRS Board of Trustees undertook an in-depth review of the investment policies and programs of the Virginia Retirement System. The impetus for this review grew, in part, from the establishment of a new prudence standard for VRS investments. The scope and quality of the review was strengthened by new membership requirements for the IAC and REAC. Changes in the prudence standard and in the advisory committee membership requirements were enacted by the 1994 General Assembly.

The VRS investment review process, which is on-going, has resulted in several significant policy changes, particularly in asset allocation. Some policy decisions in other areas, such as implementation of specific investment programs, await the results of further study. Given the long-term nature of a pension fund investment program, it will take several years for VRS to fully implement its new policies, particularly the revised asset allocation. Consequently, a complete evaluation of the effectiveness of the new VRS investment policies and programs is premature at this time. However, given the amount and complexity of the investment issues which have been addressed, the approach taken by the VRS Board and its advisory committees to date appears to have been reasonable.

Figure 5: VRS Total Contributions *vs.* Total Expenses



*Estimated
Source: Virginia Retirement System.

OVERSIGHT VRS Report

JOINT LEGISLATIVE AUDIT & REVIEW COMMISSION
OF THE VIRGINIA GENERAL ASSEMBLY

Semi-Annual VRS Investment Report: September 1995

Quick Summary and Contents

VRS has made progress toward its overall asset allocation targets. However, VRS is still overweighted in domestic equity investments, at the expense of emerging market and alternative equity investments. The possible sale of the RF&P Corporation could affect asset allocation decisions.

VRS is examining the methods by which it monitors investment risks, including risks posed by the use of derivatives. It is also evaluating the structure of its real estate investment program.

VRS investment returns have shown significant improvement, but still fall below many of the established benchmarks. Investment expenses have declined substantially.

VRS benefit expenses are expected to continue to exceed contributions. The five-year investment plan assumes the net cash contribution will be zero.

Profile: Virginia Retirement System Investments

Chief Investment Officer: Erwin H. Will
Total Assets: $18.8 billion
Actuarial Return Assumption: 8%
Number of VRS Investment Staff: 19
Number of External Managers: 69
FY 1995 Investment Expenses: $53.3 Million
Number of Active VRS Members: 262,297
Number of Retired VRS Members: 78,052

Total Return on Investments

(Most Recent Full Fiscal Years)			
1992	*1993*	*1994*	*1995*
11.2%	**11.5%**	**1.7%**	**17.1%**

(Time Periods Ending 6/30/95)			
10 years	*5 years*	*3 years*	*1 year*
11.6%	**9.4%**	**9.9%**	**17.1%**

Asset Allocation (as of June 30, 1995)

	Asset Allocation (% of Total Assets)		*Where Invested* (% of Asset Class)		*Investment Strategy* (% of Asset Class)	
Asset Class	Target	Actual*	Domestic	International	Active	Passive
Equity	70%	70%	87%	13%	50%	50%
Fixed Income	21%	22%	92%	8%	100%	0%
Real Estate	9%	7%	100%	0%	69%	31%

*Of total assets, 1% was cash.

September 1995 Report on the VRS Investment Program

INTRODUCTION

To help provide Virginia Retirement System (VRS) members with reasonable assurance as to the security of their retirement benefits, employer and member contributions to the pension fund are professionally invested in equity, fixed income, and real estate instruments. As the fiduciary of the pension fund, the VRS Board of Trustees (the Board) - aided by its advisory committees and the VRS investment staff - is continuing a detailed review of the pension fund's $18.8 billion investment portfolio. Particular emphasis is currently being placed on the retirement system's real estate investments. The primary purpose of this ongoing evaluation is to ensure that the investment programs and strategies used to implement the asset allocation policy established by the VRS Board are as effective and efficient as possible.

Primarily due to strong increases in the value of the domestic equity market, which reached a record level, VRS investment performance improved substantially in recent months. However, when viewed over the longer term, VRS investment performance has been lower than the Board's own currently established benchmarks for many of its asset classes. This raises some questions, which VRS is working to address, concerning the cost effectiveness of the investment program structure. VRS is also in the process of examining ways to more effectively monitor and control the various risks taken in its investment program, including but not limited to those inherent in the use of derivative products and strategies.

VRS is facing an additional investment issue that is rather unique. VRS has received several unsolicited offers to purchase some or all of the RF&P Corporation (RF&P). A special committee composed of VRS trustees and RF&P directors is in the process of evaluating the offers that have been received, and assessing the options of VRS concerning its investment in RF&P.

Study Mandate

The Virginia Retirement System Oversight Act (Section 30-78 et seq. of the *Code of Virginia*) requires VRS to submit semi-annual reports on its investment program to JLARC. The statute requires that the report be in a format approved by the Commission and that it include information concerning (i) planned or actual material changes in asset allocation, (ii) investment performance of all asset classes and sub-classes, and (iii) investment policies and programs. This report is, in part, a summary of VRS' submission for the six months ending June 30, 1995.

Study Approach

This report was prepared based on information provided by VRS, in response to a written request for data and documentation prepared by JLARC staff. The written request developed by JLARC staff concerned the following investment issues: asset allocation, investment policy, investment performance, long-term assets and liabilities, and short-term investments and liquidity.

JLARC staff developed additional information concerning the status of the investment program during attendance at the monthly meetings of the VRS Board, the Investment Advisory Committee (IAC), and the Real Estate Advisory Committee (REAC). Written materials furnished at these meetings, and discussions concerning those materials, provided an additional factual and contextual basis for this report.

Report Organization

This report provides a summary update of the investment policies, procedures and performance of

VRS OVERSIGHT 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.**

JLARC VRS Oversight Subcommittee:
Senator Stanley C. Walker, Chairman
Senator Hunter B. Andrews
Delegate Robert B. Ball, Sr.
Delegate Vincent F. Callahan, Jr.
Delegate Jay W. DeBoer
Senator Joseph V. Gartlan, Jr.
Delegate Franklin P. Hall
Senator Richard J. Holland
Delegate Lacey E. Putney

JLARC Staff Director:
Philip A. Leone

JLARC Staff Assigned to VRS Oversight:
Glen S. Tittermary, Senior Division Chief
Joseph J. Hilbert, Principal Legislative Analyst
John W. Long, ***VRS Oversight Report*** **Editor**

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VRS. The first section of the report examines asset allocation. The second section reviews other elements of the VRS investment policy. The third section discusses VRS investment performance. The final section presents a discussion of VRS funding and liquidity.

ASSET ALLOCATION NOT FULLY IMPLEMENTED

Asset allocation is the single most important factor underlying the long-term success or failure of any investment program. According to the VRS asset allocation policy, the pension fund is to be invested in three broad asset classes as follows: 70 percent of fund assets in equities, 21 percent in fixed income, and nine percent in real estate. Since adopting this policy in September 1994, VRS has made progress toward achieving those policy targets. However, the potential sale of some or all of RF&P may have significant implications for the VRS asset allocation policy. This section provides an update on the current VRS asset allocation policy.

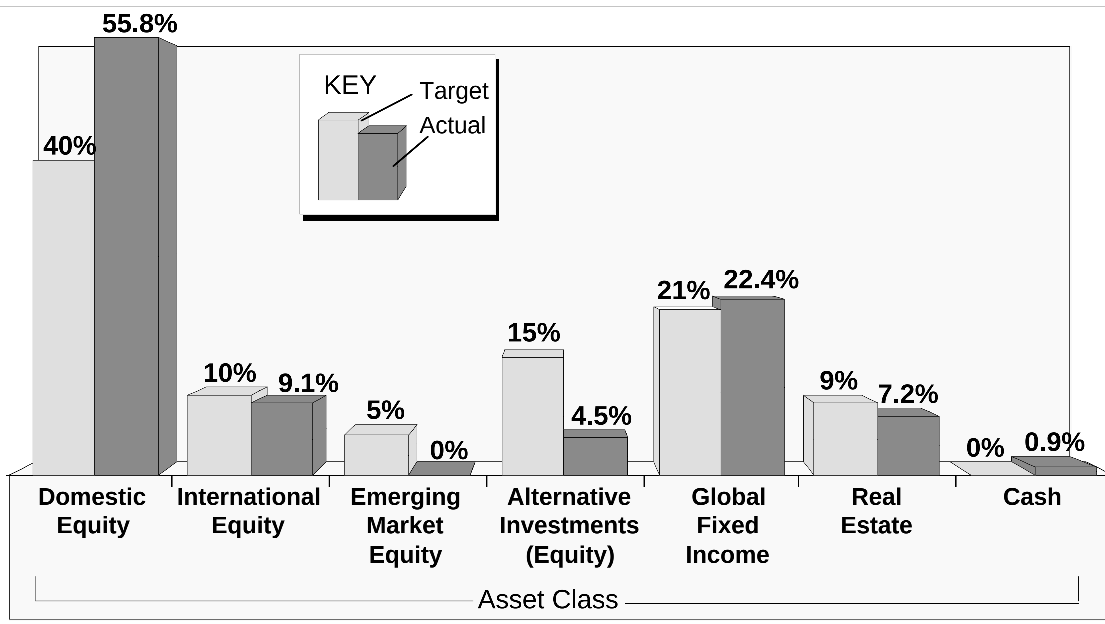
Asset Allocation Differs from Policy Targets

VRS is in the process of implementing its asset allocation policy. Substantial progress has been made toward attaining the broad allocation of 70 percent equity, 21 percent fixed income, and nine percent real estate. However, little progress has yet been made in allocating equity investments among the domestic, international, emerging market, and alternative investment sub-classes, as prescribed by policy. This is reflective of the considerable amount of time that can be required in order to invest hundreds of millions of dollars. Moreover, as the market value of assets increases, the amount of additional funds to be invested in order to satisfy allocation percentages also increases. The Board has approved overweighting the pension fund in domestic equity until the full amount of the planned investment in emerging markets can be made. Figure 1 (below) illustrates the difference between the actual allocation of VRS assets, and the long-term asset allocation policy targets established by the Board.

Potential Sale of RF&P May Affect Asset Allocation Policy

In the Spring of 1995, VRS received four unsolicited offers to purchase some or all of RF&P. As the fiduciary of the pension trust fund, the Board is responsible for determining whether any one of these offers is in the best interests of the members and beneficiaries of the retirement system. In response to the offers, which

Figure 1: VRS Asset Allocation – Actual Compared to Policy Targets, as of June 30, 1995



Note: VRS invested $215 million, or approximately 1 percent of fund assets, in emerging market equity subsequent to June 30, 1995.

Source: JLARC staff analysis of VRS asset allocation data.

vary considerably in terms of dollar amount and conditions, the VRS Board and the RF&P Board established a special committee to evaluate the merits of the various offers and explore options.

The special committee hired the investment banking firm of Lehman Brothers (Lehman) to provide professional assistance during the course of the review. Lehman examined an assortment of potential options for VRS ranging from accepting one of the existing offers, soliciting additional offers, or retaining the RF&P as a long-term investment. Based on the evaluation performed by Lehman, and the recommendation of the special committee, the VRS Board and the RF&P Board jointly authorized Lehman to solicit offers to purchase all or part of VRS' interest in the capital stock of RF&P. Lehman will simultaneously evaluate other options with respect to the sale of less than all of RF&P's assets as well.

Effect of Potential Sale on Asset Allocation. If VRS does sell RF&P in its entirety, it is possible that the VRS asset allocation policy will change. In June, the Chief Investment Officer (CIO) recommended a new allocation policy to the IAC premised on the sale of RF&P for $540 million. Under the proposed policy, fixed income investments would increase from 21 to 25 percent of assets, while real estate would decrease from nine to five percent of assets. According to the CIO's recommendation, the current 70 percent target allocation for global equity would remain. However, the domestic equity allocation would increase from 40 to 45 percent of assets, while the private equity allocation would be reduced from 15 to ten percent.

The IAC postponed taking any action on the CIO's recommendation for two reasons. First, an actual sale of RF&P had not yet occurred. Second, the IAC was reluctant to recommend a significant change to the asset allocation policy so quickly, given that it had gone through an extensive, time consuming process in order to establish the policy.

COMPONENTS OF INVESTMENT POLICY BEING EVALUATED

Within its three broad asset classes of equity, fixed income, and real estate, it is the policy of VRS to invest in a number of sub-asset classes using several different investment styles and strategies. A constant challenge for VRS is to maximize its investment return while ensuring that risk and expenses remain at acceptable levels. In order to accomplish this, VRS investment policy undergoes continuous monitoring and scrutiny. Table 1 summarizes the current structure of the VRS investment program.

VRS is currently examining several important policy issues. One of these involves enhanced monitoring of investment risks, including those inherent in the use of derivative investment products. Another broad issue concerns the VRS real estate program, which is undergoing an internal review designed to evaluate its rationale, advantages, and disadvantages. This section discusses recent actions taken by VRS concerning these two issues.

Monitoring of Derivative Investment Products Is Under Review

Sweeping changes in global financial markets have contributed to a rapid expansion in the development and use of derivative investment products. A derivative is a financial product whose value is derived from another underlying financial asset, interest rate, currency, commodity or index. Derivatives may also be defined as a contractual agreement between two parties who exchange payment streams linked to an underlying asset or financial indicator. Examples of derivatives include futures contracts and options to buy or sell stock. Table 2 identifies some of the more traditional types of derivative products used by VRS investment managers.

Like any type of investment product or strategy, derivatives can result in financial losses if the risks associated with the investment are not fully understood and prudently managed. VRS uses derivative instruments, as do many other public employee retirement systems, in order to reduce the risk of changes in asset value due to fluctuations in market conditions, such as interest rates and foreign currency exchange rates. VRS, like many other institutional investors, also uses derivatives as a means of generating additional earnings.

Amount of VRS Exposure to Derivatives. As of March 31, 1995, the contractual value of VRS' net exposure to derivative products was approximately $1.2 billion or less than ten percent of the entire fund. The contractual value represents the volume of outstanding transactions in derivative products and does not represent the potential for gain or loss associated with the credit and market risks of those instruments. This value is based on definitions and requirements established by the Financial Accounting Standards Board.

As part of an effort to more fully identify and understand the use of derivative products, the Governmental Accounting Standards Board recently issued Technical Bulletin No. 94-1. This requires VRS to disclose, for each of its investment managers, the following information concerning the use of derivatives:

- The total contractual amounts which were used, held, or written;
- The nature of each derivative transaction and the reason for using each derivative transaction; and

Table 1: VRS Investment Program Structure

Asset Class	Structure	Performance Objective
Domestic Equity	Stock holdings in corporations traded on U.S. stock exchanges Recognizes style (growth and value) and capitalization (large, medium, small) differences Active / passive, and internal / external management	*Active Program*: Exceed total return of the Russell 3000 by 100 basis points over rolling three-year periods net of all costs *Passive Program*: Approximate total return of the broad market annually
International Equity	Stock holdings in corporations traded on stock exchanges of foreign countries, primarily those with developed economies and financial markets. Recognizes regional (Europe and Pacific Basin) and capitalization (large, medium, small) differences Active and passive management. Currently uses only external management. Internal management may be used in the future	*Active Program*: Exceed total return of the Morgan Stanley EAFE 50/50 by 200 basis points over rolling three-year periods net of all costs, and Exceed total return of broad domestic index, such as S&P 500, over five to ten year period net of costs. *Passive Program*: Approximate total return of the EAFE 50/50 annually net of costs
Emerging Market Equity	Stock holdings in corporations traded on the stock exchanges of nations with developing economies and financial markets. Takes advantage of long-term above average growth rates, low correlation with the returns of other equity investments, and regional diversification. Currently uses only passive external management. Active management, and internal management, may be used in the future.	*Active Program*: Exceed total return of the International Finance Corporation investable liquidity-tiered index by 200 basis points over rolling three-year periods net of all costs *Passive Program*: Approximate total return of the International Finance Corporation investable liquidity-tiered index annually net of all costs
Alternative Investments (Equity)	*Private Equity*: Direct equity and sub-debt investments, usually as a limited partner, in privately owned companies. Diversified across various niches including venture capital, growth capital, buyouts, distressed companies, and energy Active, external management *Absolute Return Strategies*: Trading strategies, possibly including the use of hedge funds and arbitrage, whose investment returns are not tied to the performance of the overall market. (Not yet implemented)	Exceed the Russell 3000 by 400 basis points, annualized, over rolling ten year periods
Fixed Income	Bond holdings diversified by maturity (short, intermediate, long); sector (government/agency, finance/asset backed, corporate); and region (domestic, international). Majority of bonds are AAA rated Active and passive management. Currently uses only external management. Internal management may be used in the future	Exceed the Lehman Brothers Aggregate Bond index over rolling five-year periods
Real Estate	Investments diversified by property type (industrial, office, retail, apartment) and region (economic). Includes developed and undeveloped real property owned by RF&P Corp. Active and passive external management	*Active Program*: Five percent real rate of return, net of all fees (exclusive of RF&P) *Passive Program*: Four percent real rate of return, net of all fees

Source: JLARC staff analysis of IAC Policy Guidelines, and REAC Policy Guidelines.

Table 2: Derivative Investment Products Used by VRS

Derivative	Definition and Characteristics	Example
Futures Contract	Obligates the holder to buy or sell a specific amount of an underlying asset, reference rate or index at a specified price or yield on a specified future date Standardized contracts traded on organized exchanges Daily publicly quoted market prices Net change in contract value settled in cash with the exchange, usually before contract maturity Subject to market risk	A pension fund desires a broad domestic equity market exposure, such as that represented by the S&P 500, for a six month period. One alternative is to purchase all 500 stocks in their respective market and capitalization weights. This alternative generates high commission and market impact costs. A second alternative is to purchase an equivalent amount of S&P 500 futures contracts. Purchase of the futures contracts is less costly over the short term, while achieving the same equity market exposure and rate of return. Since costs are lower with the purchase of S&P 500 futures contracts, the return net of all costs to the pension fund is greater.
Forward Contract	Obligates the holder to buy or sell a specific amount or value of an underlying asset, reference rate or index at a specified price or yield on a specified future date Customized contract negotiated between two counterparties and traded over-the-counter No funds transferred until contract maturity Subject to market risk and credit risk	A pension fund with stock holdings in a foreign country wants to avoid having its expected stock appreciation voided by anticipated currency depreciation. The fund expects the stock price to increase, and the value of the local currency to decrease relative to the U.S. dollar, within the next 90 days. For protection, the fund purchases a forward contract to sell the foreign currency, in an amount equal to the current stock value, in 90 days at the current U.S. dollar exchange rate.
Foreign Exchange Contract	Involves the exchange of two currencies, at a future date, using a specified currency exchange rate. Can include forward, futures, or options contracts Most trades executed through an international network of banks and brokers, rather than through an exchange Subject to market risk and credit risk (depending on type of contract)	A pension fund desires to protects the value of a portion of its fixed income portfolio from the effect of changing exchange rates in a particular country. The fund receives its investment return in that country's local currency. The U.S. dollar value of that return depends on the currency exchange rate. Expecting the value of the local currency to decrease relative to the dollar, the pension fund purchases a contract to sell the foreign currency, in an amount equal to the current bond value, at a future date at the current exchange rate.
Option	Grants the holder the right, but not the obligation, to purchase or sell a financial instrument, such as stock or a stock index, at a specified price and within a specified period of time. May be traded through an organized exchange or over-the-counter Subject to market risk and credit risk (if not exchange traded)	A pension fund, concerned that stock prices will fall, wants to protect the current market value of one of its largest stock holdings. The fund buys an option to sell shares of stock A at a future date at the current price. This protects the current market value of the pension fund's invest-ment, but its total profit is reduced by the cost of buying the option.

Source: JLARC staff review of Financial Statement Note No. 5 of VRS 1994 Annual Report; *Financial Derivatives: Actions Needed to Protect the Financial System* (General Accounting Office, May 1994), *Investments* (Bodie, Kane and Marcus, 2nd edition), *Barrons Finance and Investment Handbook*, and interviews with VRS investment staff.

- Identification of the credit and market risk associated with each transaction

VRS is the process of surveying its investment managers in order to develop the information needed to comply with this new standard.

Types of Risks Inherent in Derivatives. The VRS portfolio is exposed to two general types of risks through the use of derivatives: credit risk and market risk. Credit risk is the possibility that a loss may occur from the counterparty's failure to perform according to the terms of the contract. This risk is present in all over-the-counter ("OTC") derivative products, but is virtually eliminated in exchange-traded products. According to VRS, a financial loss due to credit risk could occur only on derivatives which have increased in market value since the contract was written. Market risk is the possibility of a loss due to unfavorable fluctuations in market price, interest rates, or foreign exchange rates. The effect of this type of risk can be amplified by trading through the use of leveraged margin accounts.

VRS Derivatives Monitoring Process. The process currently used by the VRS investment department is based on the guidelines contained in each investment manager's contract. The investment staff compares managers' holdings to the contractual guidelines, and to the coding of investment accounts by the VRS custodian bank (Mellon Trust) outlining the specific derivative instruments that may be utilized by each manager. The contract guidelines vary in their level of detail, and are currently being reviewed by the investment staff in an effort to make them more uniform regarding language and specificity. As an additional part of the monitoring process, the investment department reviews monthly manager performance reports, annual manager questionnaires, and visits each manager at least annually.

Monitoring Process Requires Enhancement. In April 1995, VRS investment staff reported to the IAC on a need to enhance existing procedures for monitoring derivative investments. Staff identified several procedural deficiencies involving the use of derivatives. First, the institutional accounting and custody management systems maintained by Mellon Trust do not provide VRS staff with indicators of the levels of risk involved in various investments or the effects of market movements in equity, interest rates or currency valuations on the portfolio values. Second, Mellon Trust is not able to provide VRS with any information concerning the use of derivatives by commingled accounts – typically passively managed stock index funds – in which VRS is invested. These commingled accounts are not custodied at Mellon Trust. Third, neither the Mellon computer system nor the manager investment guidelines distinguish between exchange-traded or OTC derivatives.

In response to these identified weaknesses, VRS is evaluating methods by which it can most effectively and proactively monitor the risks posed by its derivative exposure. The VRS investment department has established a risk management sub-committee to conduct this review. Currently, the sub-committee has identified several alternatives to enhance the current risk monitoring process. One alternative involves a new monitoring system under development by Mellon Trust, which would include daily monitoring and monthly reporting. A second alternative involves identifying and purchasing a software package developed by an external provider which would reside on a VRS computer. A third alternative would be to hire an external third-party risk monitoring service which would have the expertise, systems, and staff in place to review the VRS portfolio.

VRS is Evaluating its Real Estate Investment Program

The VRS real estate program consists of 27 accounts managed by nine external investment managers, exclusive of RF&P. RF&P comprises 40 percent of the total VRS real estate portfolio, but in practice is not considered part of the VRS real estate investment program that is overseen by REAC. The VRS real estate program consists of two primary components: passively managed commingled funds and actively managed direct equity investments.

Unlike the VRS equity and fixed income programs, the real estate investment program did not come under immediate scrutiny, or receive significant policy changes, following the appointment of the new VRS Board. While the real estate investment staff did begin to operate under the guidance of a new REAC, the program continued to function according to essentially the same policies and procedures as it had under the previous Board and REAC.

In the spring of 1995, the CIO focused his attention on the real estate program. The CIO directed VRS real estate staff to examine the rationale for VRS real estate investments, and to evaluate the current methods by which real estate investments are made. The objective of the review was to improve the effectiveness and efficiency of the program by reducing the number of investment managers, consolidating accounts and/or selling assets when and where the opportunity exists. The CIO's action was taken in response to concerns that he expressed to the REAC, including the fact that 25 percent of the VRS investment staff is devoted to managing less than nine percent of the fund's assets.

Types of VRS Real Estate Investments. VRS real estate investments consist of two primary types of investment vehicles: commingled funds and direct equity transactions. As of March 31, 1995, these two types of investments comprised 86 percent of the VRS real estate portfolio, exclusive of RF&P. The remainder of the real estate portfolio is comprised primarily of participating mortgages, and participating equity separate accounts, with large insurance companies. The portfolio also includes the VRS headquarters building, and a parking deck in the City of Richmond.

A real estate commingled fund is analogous to a mutual fund whereby a manager pools individuals' money and invests for the benefit of the fund. VRS first invested in commingled funds in 1981, as a means of obtaining quick exposure to real estate investments. VRS currently invests passively in six commingled funds, which comprise approximately 43 percent of the VRS real estate portfolio, exclusive of RF&P.

Under the direct equity program , VRS invests in specific properties through special purpose corporations designed to legally protect the VRS pension trust fund from liability. Direct equity investments currently make up approximately 43 percent of the VRS real estate portfolio, exclusive of RF&P. While this percentage is currently about the same as for commingled funds, the direct equity component of the program is growing at a much faster rate.

The first direct equity investments were made in August 1992. Due to its continued ownership of the RF&P, VRS has generally avoided making new real estate investments in Virginia in order to promote continued diversification. This is despite the fact that all of the REAC members are from Virginia, and are extensively familiar with the State's real estate markets.

VRS typically makes all-cash investments under the direct equity program. However, VRS is considering the possible use of borrowed funds to leverage a portion of current and future investments. This would make more cash available for other types of VRS investments, and could potentially enhance the return on the direct equity program.

Rationale for Real Estate Investments. According to the VRS real estate staff, the strongest reason for VRS to make real estate investments is the low correlation between rates of return on real estate and those on stocks and bonds. This means that, if returns on stocks or bonds decrease, real estate returns would not ordinarily be expected to decrease simultaneously. This helps to protect the overall pension fund by increasing diversification and reducing risk. Other reasons are also cited by the VRS staff in support of continued real estate investments. These are protection from unexpected inflation – provided the supply and demand characteristics of the market are in balance – and competitive returns over the long term.

The primary disadvantage of real estate investments identified by VRS staff is a lack of liquidity compared to stocks and bonds. In the event VRS becomes dissatisfied with a particular investment, it is difficult to recoup the amount invested in a timely manner. The ability to exit an investment, without realizing a substantial loss, is dependent on successful property sales. This is more of a concern with the commingled funds than with the direct equity investments, since VRS has little control over the investment decisions of commingled funds.

Possible Investment in Real Estate Investment Trusts. In order to help achieve its asset allocation in a more timely but still prudent manner, VRS is considering investments in real estate investment trusts (REITs). A REIT is a corporation or trust that owns real estate assets for investment, issues stock, and passes through income to its shareholders. REITs typically specialize in the investment and management of specific types of real estate, such as shopping malls or apartment complexes. REITs also tend to specialize in particular real estate markets.

If a REIT adheres to certain rules governing the identity and number of its shareholders, and meets certain financial criteria, then it is exempt from federal corporate income tax liability. In order to qualify for tax exemption, REITs are required to invest 75 percent of their total assets in real estate, derive 75 percent of their income from rents on real property, and distribute at least 95 percent of their income to shareholders. The majority of REITs are public, in that their stock is traded on major exchanges. There are also private REITs, such as the RF&P, that do not publicly trade their stock.

The REAC is still considering whether or not to invest in public REITs. Potential advantages of REIT investments include quick exposure to specific types of real estate, greater liquidity, a daily publicly quoted market stock price, and competitive risk-adjusted returns. Potential disadvantages of REIT investments are greater short-term volatility and a higher correlation with the equity market.

INVESTMENT PERFORMANCE IMPROVES IN FISCAL YEAR 1995

The rate of return earned by VRS on its investments has improved significantly over the past year. This is due, in large part, to tremendous increases in the value of the U.S. equity market, as measured by an index such as the Standard & Poors index of 500 stocks (S&P 500). However, VRS returns are lower than many of the benchmark measures that it has established to evaluate investment performance of the total fund and individual asset classes. These benchmark measures include a broad index consisting of 70 percent of the return of the S&P 500 and 30 percent of the return of the Lehman Brothers Aggregate Bond Index (the 70/30 index). Still, VRS has outperformed some of its other benchmarks.

The relative under performance of VRS investments, compared to the benchmarks, have caused VRS to consider whether its returns justify the amount of active management fees currently being paid to the pension fund's external investment managers. This is a question that is being asked with increasing frequency by institutional investors across the country. The CIO is concerned that the investment results do not justify the management fees. Primarily for that reason, VRS significantly reduced the number of external managers, and the amount of its investment expenses, over the past year. In addition, the percentage of equity investments that are passively managed has increased substantially, from 36 percent to 50 percent. This section presents a summary of VRS investment performance and expenses.

Recent Performance Has Improved But Still Lags Many Benchmarks

Any evaluation of pension fund investment performance is highly dependent on the period of time for which the return is calculated, the chosen benchmark, and the asset allocation. For example, the total net return over the past year was 17.1 percent but over the past ten years it is 11.6 percent on an annual basis. Due to the long-term nature of liabilities, it is most useful to assess pension fund investment performance over as long a period of time as possible. The ten year return of 11.6 percent is consistent with the long-term investment return assumption that VRS used as part of its 1994 asset allocation study. Figure 2 (page 10) summarizes VRS investment performance over the past one, three- and five-year periods.

Measurement of Overall VRS Investment Performance. The investment performance of the total pension fund is evaluated using benchmark measures defined in the VRS investment policy statement and approved by the VRS Board. The policy statement specifies two benchmarks for assessing total fund performance. The primary performance objective for the fund is to produce a return greater than the long-term policy return, referred to as the static benchmark, over a ten year period. The static benchmark is defined as the long- term allocation target for each asset class multiplied by the benchmark return for the asset class. Additionally, the total fund return is expected to exceed the return of a broader benchmark, the 70/30 index, over a ten-year period.

During the twelve months ending June 30, 1995, the VRS total fund return of 17.1 percent was greater than the static benchmark return of 16 percent. However, the total fund return was far lower than the 70/30 index return of 21.9 percent. The existence of two performance benchmarks, with one designated as primary, makes it difficult to definitively assess the investment performance of the total fund. The IAC is working to address the issue of how best to measure the overall investment performance of the total fund.

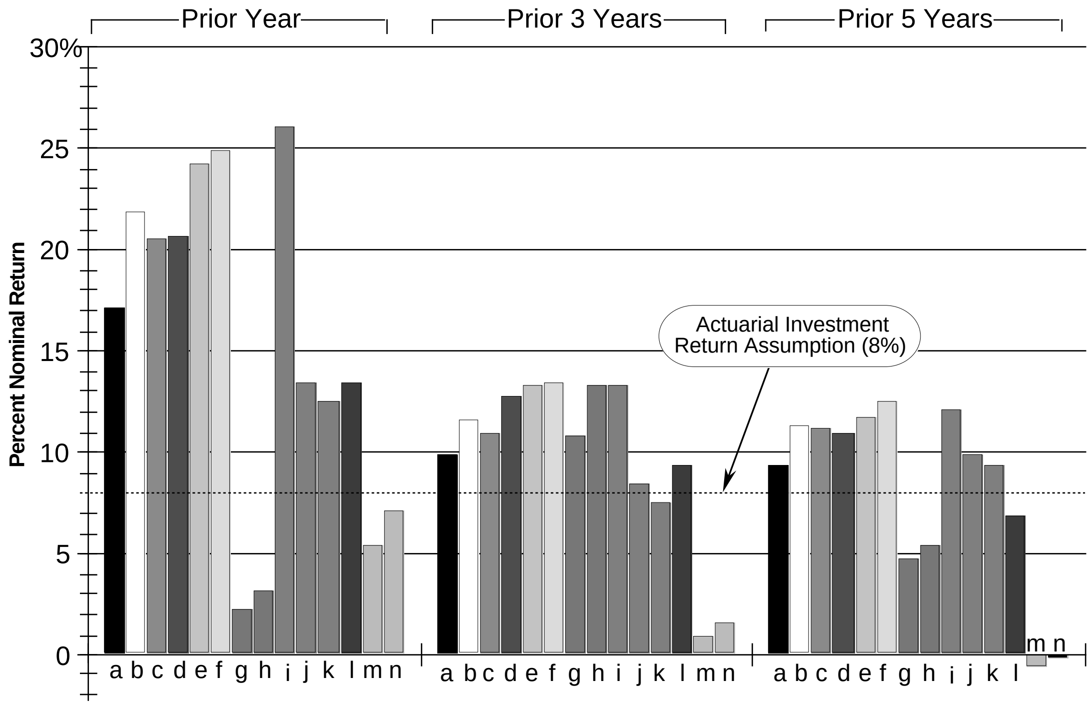
Another factor which precludes definitive assessment of overall VRS performance is the ten year investment measurement period for the total fund. It will, in all likelihood, require several years for VRS to fully implement its asset allocation policy and then additional time for the implemented policy to prove its value. Until such time, perhaps as long as ten years from now, expected investment returns under this allocation strategy may not be fully realized. Consequently, until the asset allocation policy is fully implemented, use of the 70/30 benchmark will have its limitations in measuring performance during future time periods.

Due to the recent significant change in asset allocation policy, use of the 70/30 index to assess historical investment performance, over the past three, five and ten year time periods, is also problematic. Prior to July 1, 1994 , VRS was legally prohibited from allocating more than 60 percent of its assets to stock. In order to take this situation into account when assessing long-term performance, the CIO has evaluated total fund performance relative to a benchmark consisting of 60 percent of the return of the S&P 500 and 40 percent of the return of the Lehman Brothers Aggregate Bond Index (the 60/40 index) over a ten year period. This benchmark, which is not provided for in the investment policy statement, has had a greater investment return than the total fund over the past one, three, five, and ten year time periods.

Real Estate Investment Performance. The return earned by VRS real estate investments continues to improve, as measured over the past year. This is due primarily to the direct equity component of the investment program. However, real estate is the poorest performing asset class in the VRS portfolio over the past five years. A major factor underlying that relatively poor performance was the virtual depression in the U.S. real estate market during the early 1990s. Figure 3 (page 11) illustrates VRS investment performance over the past one, three and five-year time periods.

One of the difficulties that the VRS Board faces in evaluating the performance of the pension fund's real estate investments is the fact that there are two different sets of return data. The first set is maintained by Mellon Trust, the VRS custodian bank, and serves as the basis for the monthly investment performance report pre-

Figure 2: VRS Investment Performance for Periods Ending June 30, 1995



KEY:
- a = Total Fund
- b = 70% S&P 500 / 30% Lehman Agg. Bond (total fund benchmark)
- c = 60% S&P 500 / 40% Lehman Agg. Bond (total fund benchmark)
- d = Total Equity
- e = Domestic Equity
- f = Russell 3000 (domestic equity benchmark)
- g = International Equity
- h = EAFE 50/50 (international equity benchmark)
- i = S&P 500
- j = Total Fixed Income
- k = Lehman Aggregate Bond Index (fixed income benchmark)
- l = Alternative Investments
- m = Real Estate
- n = NCREIF Index

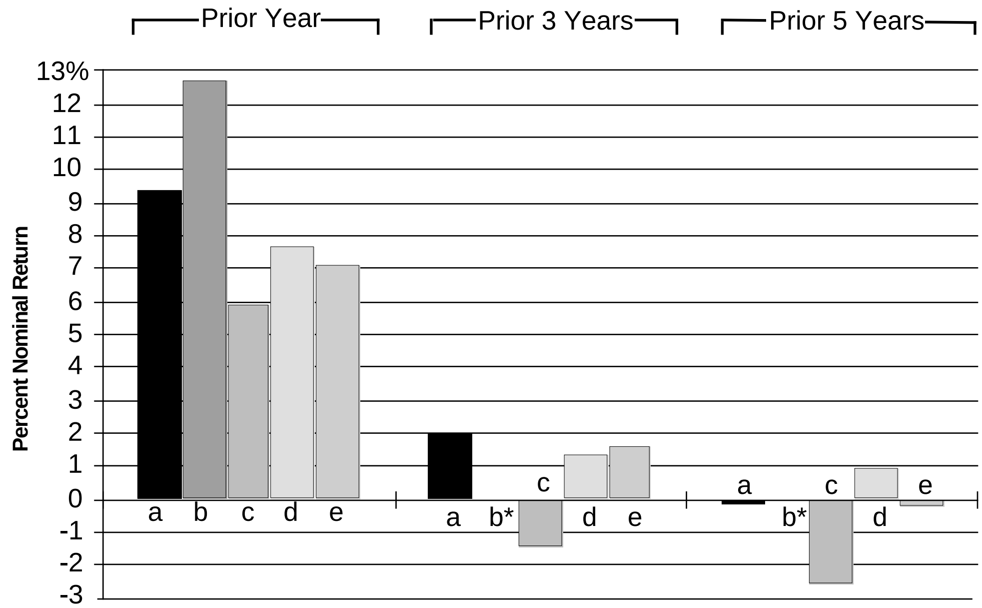
Source: JLARC staff analysis of VRS investment return data.

pared by VRS staff for the Board. The second set is prepared by Callan Associates, the VRS real estate investment consultant, and is presented to REAC each quarter.

VRS real estate performance as reported by Mellon Trust differs from that reported by Callan for the same time period, as shown in Table 3 (opposite). The most important reason for the difference is that, while the investment performance data furnished by Mellon Trust includes the RF&P, the Callan report does not. The RF&P is excluded from the Callan report at the direction of REAC, in recognition of the fact that REAC has no control over the investment performance of RF&P. The second, less significant, reason for the difference involves the reporting cutoff dates used by Mellon Trust and Callan. Mellon Trust has a reporting cutoff date of five days after the end of a quarter. Callan, on the other hand, has the flexibility to extend its reporting cutoff date to as much as 60 days after the end of a quarter. Consequently, unlike Mellon Trust, Callan is able to capture accounting transactions during the quarter in which they occur.

In order to assure the accuracy of VRS real estate performance data, Callan produces a semi-annual investment performance reconciliation in conjunction with Mellon Trust and the VRS real estate investment managers. VRS real estate investment staff acknowledge that there is a need for further improvement in reconciling performance data from Mellon Trust and Callan, particularly for the three- and five-year time periods. The CIO, and the real estate staff, hopes to make the necessary improvements over the next six months.

Figure 3: VRS Real Estate Performance for Periods Ending March 31, 1995



KEY: a = Total VRS Real Estate Portfolio
b = Direct Equity
c = Pooled
d = Other
e = NCREIF index

Note: Excludes RF&P Corporation, VRS headquarters building, and a parking deck located in the City of Richmond.
*Direct equity not applicable for prior 3 and 5 years because direct equity investments were first made in 1992.
Source: JLARC staff analysis of VRS real estate performance report prepared by Callan Associates.

Table 3: VRS Real Estate Investment Performance as Reported by Mellon Trust and Callan Associates

	Time Periods Ending March 31, 1995		
Data Source	1 Year	3 Years	5 Years
Mellon Trust (including RF&P)	**5.40%**	**0.90%**	**-0.60%**
Mellon Trust (excluding RF&P)	**9.65%**	**0.64%**	**-0.89%**
Callan Associates (excluding RF&P)	**9.21%**	**1.87%**	**0.01%**

Note: Performance data includes VRS headquarters building, and a parking deck located in the City of Richmond.

Source: JLARC staff analysis of VRS Performance Summary prepared by VRS staff; and Real Estate Performance Report prepared by Callan Associates, Inc., and interviews with VRS real estate investment staff.

Expenses and Number of Investment Managers Have Been Reduced

The amount of money that VRS pays to its external investment managers represents a sum that would otherwise go directly into the pension trust fund. The 1993 JLARC report recommended that VRS significantly reduce the number of managers, an action that could lead to significant efficiencies and economies. For these reasons, it is important for VRS to continually assess the number of managers that its uses, and the fees that those managers are paid. VRS has been conducting this type of assessment, and has reduced both the number of external managers and total investment expenses.

VRS currently has 69 investment managers and one investment consultant, as compared to 105 mangers and consultants on July 1, 1993. This enabled VRS to reduce its investment expenses by $15 million in FY 1995, as shown in Figure 4 (below). This substantial reduction followed an extended period of time, going back at least until FY 1986, during which investment expenses increased at a much higher average annual rate (97 percent) than did pension fund assets (25 percent.)

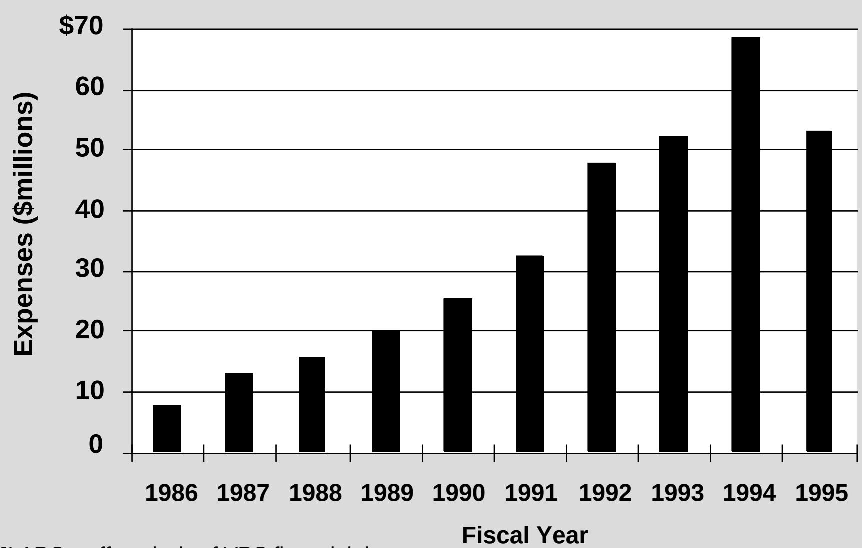
Number of Private Equity Managers. The total number of managers reported by VRS, for 1993 through 1995, does not include private equity managers hired by Brinson Partners (Brinson) on behalf of VRS. Brinson serves VRS as both a private equity manager and consultant. As a manager and a fiduciary, Brinson has the authority to hire managers of private equity funds which raise less than $200 million in capital. There are currently 27 such managers. However, VRS counts Brinson, and all of the managers that Brinson hires, as a single manager. According VRS investment staff, that is done because VRS does not directly manage the firms hired by Brinson. However, these firms are paid directly by VRS.

Investment Fee Structure. The vast majority of VRS investment managers are paid a fee which is based on the amount of assets under management. This is typically either a flat percentage of the assets, or a declining percentage as the amount of assets increases. The major exception to this fee structure is the real estate direct equity program, whose managers are paid an asset management fee calculated on a formula based on net investment cost and net cash flow. In addition, a 20 percent incentive fee is paid every three years on the real rate of return in excess of five percent. The first incentive fees under the program are due in September 1995. In response to a concern that the incentive fees, agreed to in 1991 and 1992, are now higher than market-rate fees, VRS will attempt to renegotiate these fees with its direct equity real estate managers.

BENEFIT EXPENSES EXCEED CONTRIBUTIONS

The flow of contributions into the retirement system affects the ability of the investment program to help fund increases in pension liability. Additional contributions provide new funds for investment, which in turn can produce a greater amount of investment income. VRS expects that its expenses will continue to exceed its contributions for the foreseeable future,

Figure 4: VRS Investment Expenses, FY 1986 – FY 1995



Source: JLARC staff analysis of VRS financial data.

resulting in a negative net contribution. In this type of financial environment, revenue generated by the investment program must be used to cover a portion of VRS pension expenses. Moreover, in the absence of any net new cash being contributed to the pension fund, VRS must rely on reallocations from overweighted asset classes - primarily domestic equity - in order to provide the cash necessary to fund prescribed allocations in alternative investments and emerging markets. This section provides a brief update on projected VRS cash flow, and on the recent results of its short-term investment program.

Contribution Rates Affect Probability of Reaching Desired Asset Level

One of the key characteristics of retirement system finance is that cash contributions are invested in order to increase the total amount of funding for the system. The greater the amount of cash contributed into the system, the greater the potential investment income that may be earned. Since the Summer of 1994, VRS has been working closely with its actuary to evaluate the funding requirements of the system.

Initially, the VRS actuary calculated the contribution rates necessary to achieve specific funding ratios, given certain probabilities of success, under various types of asset allocations. This was done as part of the Board's effort to establish a new asset allocation policy. Subsequently, the actuary calculated the contribution rates necessary to fully prefund the cost of living allowance (COLA) in accordance with generally-accepted actuarial principles. This was done as part of the Board's review of alternatives, presented to the Governor and the chairmen of the legislative money committees, for funding the COLA.

Both actuarial studies resulted in the calculation of contribution rates deemed necessary by the actuary to accomplish specific objectives. The rates calculated in each study are not identical. This is due largely to methodological differences in the two studies. However, the results of both studies are consistent in that larger contribution rates are recommended in order to increase overall funding levels. Table 4 (below) summarizes the recommended contribution rates which the actuary calculated in both studies.

Five-Year Investment Plan Assumes Zero Net Contribution

The five-year investment plan envisions the pension trust fund reaching a market value of more than $28 billion by the end of fiscal year 2000. Cash flow is one of the implicit concerns of the five-year plan. The plan assumes that the net contribution, representing total pension fund contributions minus pension fund expenses, will be zero during the entire five-year period. In order to address this concern, VRS plans to make annual reallocations from its domestic equity portfolio – which is currently over weighted – in order to provide the necessary funding for other asset classes, particularly emerging markets and alternative investments.

Projected Expenses Exceed Contributions. VRS estimates that during FY 1996 its benefit, refund, and administrative expenses will exceed total employee and employer contributions by $88 million. This represents a negative net contribution. Table 5 (page 14) presents the components of the estimate.

Projections of the net VRS contribution for FY

Table 4: Combined Employee and Employer Contribution Rates Calculated by VRS Actuary (Percent of Payroll)

Study / Date	Funding Alternatives		
Investment Policy Study / 1994	*120% Funding Status / 50% Confidence Level*	*100% Funding Status / 90% Confidence Level*	*120% Funding Status / 90% Confidence Level*
State Employees	**7.26%**	**13.93%**	**15.79%**
Teachers	**8.74%**	**17.29%**	**19.75%**
COLA Funding Study / 1994-95	*Alternative 1 Pay-as-You-Go*	*Alternative 2 Partial Prefunding*	*Alternative 3 Full Prefunding*
State Employees	**9.85%**	**11.38%**	**13.00%**
Teachers	**11.41%**	**13.10%**	**15.79%**

Source: *Virginia Retirement System, 1994 Investment Policy Study*, prepared by Buck Consultants; and Presentation by Buck Consultants to VRS Board of Trustees on June 15, 1995.

Table 5: Projected VRS Contributions and Expenditures, FY 1996

	Amount	
Contributions		
Teachers	$384,750,000	
State Employees	307,500,000	
Political Subdivision Employees	166,940,000	
Judges	10,700,000	
State Police	7,870,000	
Retiree Health Care Credit	20,260,000	
Group Life Insurance	27,230,000	
Total Contributions		$925,250,000
Expenditures		
Annuities	$839,910,000	
Refunds	76,900,000	
Insurance Premiums and Claims	67,680,000	
Administrative	13,200,000	
Retiree Health Care Credits	15,900,000	
Total Expenditures		$1,013,590,000
NET CONTRIBUTION		**$(88,340,000)**

Source: Virginia Retirement System.

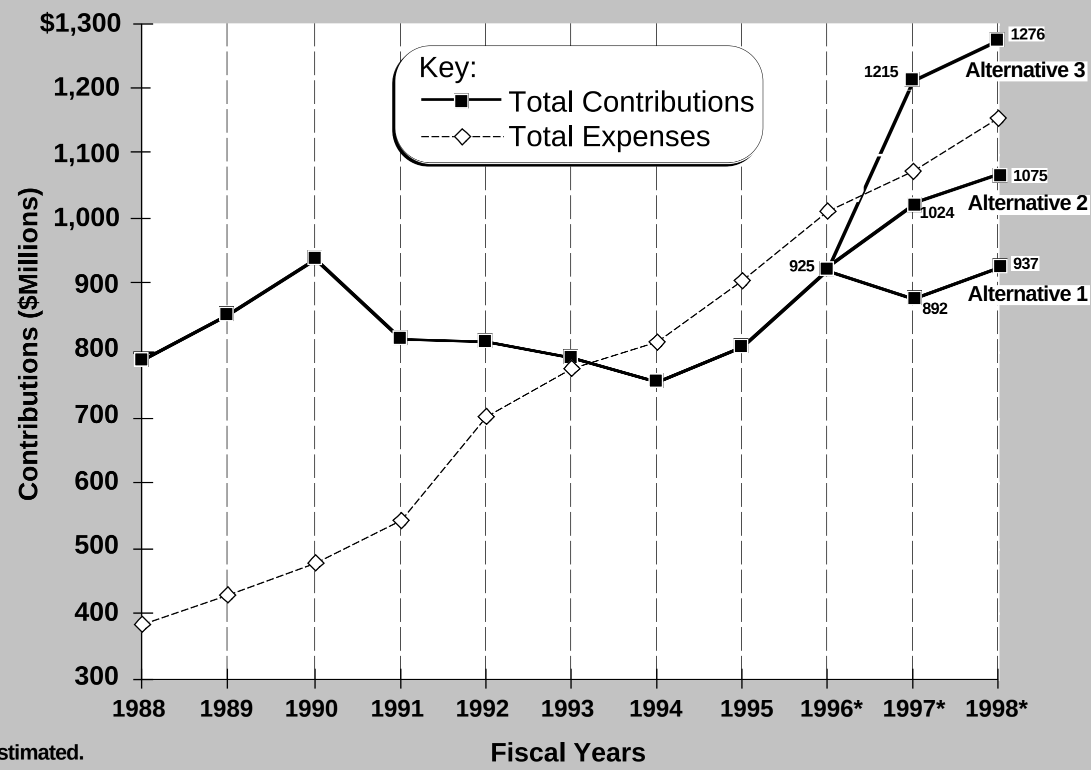
1997 and FY 1998 are dependent upon the employer contribution rates to be included in the Appropriations Act for the 1996-98 biennium. As previously mentioned, VRS recently presented three alternatives to the Governor and the chairmen of the two legislative budget committees for consideration. The amount of the net contribution for FY 97 ranges from a positive $137 million with option 3 to a negative $141 million with option 1. Figure 5 (page 15) illustrates the projected net contribution under each alternative.

Short-Term Investment Performance

Sufficient cash is maintained with the Treasurer of Virginia (Treasurer) to cover the VRS retiree payroll, refunds to members, administrative expenses, insurance premiums, and claims. The Treasurer monitors VRS cash needs on a daily basis. A portion of the cash is maintained, for immediate daily access, in an account with First Union Bank. The remainder is invested by the Treasurer in short-term instruments, such as repurchase agreements, commercial paper, and bankers acceptances. Cash necessary to meet short-term obligations, such as investment capital previously committed to investment managers, is maintained with Mellon Trust. Similar types of short-term instruments are used by Mellon Trust in order to invest this cash.

The benchmark for the short-term investment program is the 91-day U.S. Treasury Bill. However, the Treasurer and Mellon Trust each present their investment performance, relative to the 91-day U.S. Treasury Bill, differently to VRS. The Treasurer's investment performance is presented in terms of annualized yield to maturity. For the twelve months ending June 30, 1995, the annualized yield to maturity on VRS cash managed by the Treasurer was 5.62 percent. This was higher than the 5.55 percent annualized yield to maturity for the 91-day U.S. Treasury Bill during the same period. Mellon Trust's investment performance is presented in terms of realized total return. For the twelve months ending June 30, 1995, the realized total return on VRS cash managed by Mellon Trust was 5.4 percent. This was lower than the 5.6 percent realized total return for the 91-day U.S. Treasury Bill during the same period.

Figure 5: VRS Total Contributions *vs.* Total Expenses



*Estimated.

Source: Virginia Retirement System.

Contents of Part V: State and Federal Retirement Legislation

Page

Part V: State and Federal Retirement Legislation

VRS is affected by legislation enacted by both the Virginia General Assembly and the United States Congress. Most State legislation that is introduced concerning VRS modifies either benefit levels or eligibility requirements. Federal legislation also has an important impact on VRS. Federal legislation addresses items such as maximum compensation and benefit limits contained in the Internal Revenue Code (IRC) for public pension plans; social security eligibility and benefit levels; calculation of the consumer price index; and deferred compensation plans. In addition, congressional efforts to balance the federal budget could potentially eliminate the long-standing tax exemption for public pension fund investment earnings. Close attention should be paid to how Congress may attempt to tap into the assets of public pension funds.

State Legislation

The 1995 General Assembly passed, and the Governor signed, several pieces of legislation concerning VRS. These included bills (1) amending the *Constitution of Virginia* to establish VRS funds as separate and independent trust funds; (2) establishing one-time early retirement incentives as part of the Workforce Transition Act; (3) expanding early retirement opportunities for VRS members through the 50/10 provision; (4) creating an optional life insurance program; (5) allowing individuals who defer retirement to receive the health care credit; and (6) further increasing opportunities for VRS members to purchase additional service credit.

During the 1996 Session, the General Assembly gave final passage to the proposed constitutional amendment which would establish VRS funds as independent trust funds. That proposed amendment will be placed on the ballot in November 1996 for voter consideration. The1996 General Assembly also enacted legislation (1) requiring that contribution rates necessary to fully prefund the cost of living adjustment be phased in over a five-year period beginning in FY 1998; (2) making the retired teacher health care credit mandatory -- with the cost borne by the State -- effective July 1, 1998; (3) expanding opportunities to purchase additional service credit at the five percent of salary rate; (4) authorizing VRS and political subdivisions with independent retirement systems to enter into agreements concerning the portability of pension benefits; and (5) allowing individuals who retire under the 50/10 provision to defer receipt of their retirement benefit until age 55.

Federal Legislation

Several bills affecting public employee retirement systems have been introduced in the current session of Congress. While it is too early to know whether these bills will become law, they provide an indication of emerging federal issues affecting public employee retirement systems such as VRS. The following pieces of legislation are noteworthy:

- ❑ Senate Bill 818 would amend the Social Security Act to increase the normal retirement age to 70 by the year 2029, and the early retirement age to 65 by 2017. The bill also provides for additional increases thereafter.

- Senate Bill 821 would reduce the U.S. consumer price index by one-half of one percentage point and require a commission to study ways to improve the accuracy of consumer price indices and modify their calculation.
- Senate Bill 822 would cap the amount of cost of living adjustments paid to social security recipients at a dollar amount equal to the 30th percentile of cost of living adjustments.
- Senate Bill 824 would amend the Social Security Act to allow individuals to invest a portion of their social security salary withholding in a personal investment plan -- similar to an individual retirement account. Social security payroll tax rates for personal investment plan participants would be effectively lowered from 6.2 percent to 4.2 percent.
- House of Representatives Bill 1314 would define state judicial retirement systems as non-discriminatory under the provisions of the IRC.
- House of Representatives Bill 1119 would to revise the treatment of IRC Section 457 deferred compensation plans by making it easier to receive lump sum distributions of amounts below $3,500.
- House of Representatives Bill 1683 would establish a federal cause of action for the failure of a state or local public employee pension plan to meet the terms of the plan. This would permit participants or beneficiaries to bring suit against the plan for benefits or rights due under the plan.
- House of Representatives Bill 1504 would include elective deferrals of compensation, from IRC Section 401(k), 403(b), 408(k), 125, and 457 plans, in the definition of compensation for purposes of IRC Section 415 maximum benefit limits. This bill would also eliminate the current requirement that can not accrue benefits equal to more than 100 percent of their average compensation.

In February 1995, the Congressional Budget Office (CBO) provided Congress with a series of revenue-raising options for consideration as part of the effort to reduce the federal budget deficit. Some of these relate to the repeal of preferential tax provisions currently enjoyed by pension funds. One option presented by CBO is to impose a five percent tax rate on the investment earnings of pension funds. Currently, such income is tax exempt. CBO also provided, as an option, taxation as income of all employer-paid premiums for group life insurance benefits. Currently, these premiums are taxable only on coverage that exceeds $50,000.

The initial budget reconciliation package submitted by Congress, and vetoed by the President in December 1995, contained several provisions related to Section 457 deferred compensation plans. These provisions, which could still pass during this session of Congress, would allow:

- public employers to establish trusts or similar vehicles so that assets invested in 457 plans may be used only to pay benefits to plan participants and their beneficiaries;

- annual increases in the maximum contribution based on increases in the Consumer Price Index;
- one-time forward changes to participant beginning payment date elections; and
- Employer or employee initiated distributions of accounts with balances of $3,500 or less which have been inactive for two years.

Retirement Legislation Passed by the 1995 General Assembly and Signed by the Governor

Bill Number Sponsor	Key Provisions of Legislation	Estimated Fiscal Impact
HJR 20 Ball	Constitutional amendment to establish VRS as an independent trust to be administered solely in the interests of its members and beneficiaries. Would prohibit use of trust funds for any purpose other than as provided for by law for benefits, refunds, and including but not limited to legislative oversight of the retirement system. Would require that benefits be funded using methods consistent with “sound” actuarial principles.	No estimate prepared
SJR 16 Andrews	Constitutional amendment to establish VRS as an independent trust to be administered solely in the interests of its members and beneficiaries. Would prohibit use of trust funds for any purpose other than as provided for by law for benefits, refunds, and including but not limited to legislative oversight of the retirement system. Would require that benefits be funded using methods consistent with “generally-accepted” actuarial principles.	No estimate prepared
SB 723 Walker	Exempts VRS from procurement regulations issued by Department of General Services, but requires the VRS Board to adopt its own procurement regulations that are consistent with the provisions of the Virginia Public Procurement Act. Authorizes VRS trustees who also serve as directors of a VRS subsidiary or wholly-owned corporation to receive director’s fees from that corporation. Allows any current VRS trustee to serve as a member of the VRS Investment Advisory Committee or Real Estate Advisory Committee beginning five years after the end of the trustee’s term. Limits the personal liability of VRS trustees, advisory committee members, officers and directors of its tax-exempt subsidiary corporations to those actions which are outside the “prudent man” standard of care.	None
HB 1899 Heilig	Authorizes VRS Board to adopt rules and regulations designed to bring VRS into compliance with all federal laws and regulations. Authorizes VRS Board to waive 90 day notification period for disability retirement application. Changes maximum average compensation amount used in computing benefits, pursuant to Internal Revenue Service regulations. Makes technical amendment to reflect repeal of “social security” benefit payment option and adoption of leveling benefit payment option. Technical amendments concerning benefit administration.	None
SB 776 Stosch	Allows members of VRS and SPORS, who are at least age 50 with at least 10 years of service, to retire early with a reduced benefit. State employees must enter into a binding agreement with the Department of Personnel and Training not to reenter full or part-time employment in the executive branch of State government for two years following retirement.	None

(continues)

Retirement Legislation Passed by the 1995 General Assembly and Signed by the Governor (continued)

Bill Number Sponsor	**Key Provisions of Legislation**	**Estimated Fiscal Impact**
HB 2543 Croshaw SB 959 Holland, R.J.	Provides severance benefits and early retirement incentives to State employees. Full-time State employees, with the primary exception of members of the Judicial Retirement System, are eligible to participate. Full time teaching and research faculty at State institutions of higher education, and members of the State Police Officers Retirement System, may be eligible as part of approved restructuring plans. Employees who are approved for a severance benefit, and who are vested and at least age 50, may use that benefit to purchase additional years of credit towards retirement, to be applied to either service or age, at a cost of 15% of salary for each year. Additional retirement credit forfeited if individual returns to work in a VRS covered position. Participating employees must leave State service by 5/1/95, unless an alternative date is agreed to by the employing agency, but in no case later than 7/1/96.	No fiscal impact for retirement purposes because legislation requires agencies to transfer necessary funds for purchase of additional years to VRS within one year of employee's termination.
HB 1421 Morgan SB 612 Marye	Provides group life insurance benefits reduced from two times salary for those individuals who retired prior to July 1, 1970. Previously, the benefit for these individuals had been reduced from annual salary.	Undetermined
HB 1545 Giesen	Allows county administrators, city managers and superintendents of local school boards who are involuntarily separated from service to retire early with unreduced benefits at age 55 with 20 years of service.	None
SB 1064 Holland, R.J.	Requires VRS to allow employees to purchase optional life, accidental death, and dismemberment insurance in incremental amounts up to four times the employee's annual salary, not to exceed $500,000 Maximum employee coverage amount shall be increased every two years, as recommended by the VRS actuary based on increases in the U.S. consumer price index. Requires VRS to allow employees to purchase optional life, accidental death, and dismemberment insurance for spouses in an amount up to 50 percent of the maximum coverage on the employee's life Requires VRS to allow employees to purchase optional life, accidental death, and dismemberment for their children in amounts of $5,000, $10,000, or $15,000 Full cost of optional insurance to be paid by employee through salary deduction. Program structure shall not materially affect premium rates for group life insurance. VRS Board of Trustees may discontinue program on or after July 1, 1998 if participation levels are not sufficient to continue operating on an actuarially-sound basis.	$388,000 in start-up expenses for Life of Virginia Undetermined VRS administration and system development costs Total premium cost to be paid by employee

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Retirement Legislation Passed by the 1995 General Assembly and Signed by the Governor (continued)

Bill Number Sponsor	Key Provisions of Legislation	Estimated Fiscal Impact
HB 1700 Croshaw SB 897 Walker	Authorizes VRS to determine eligibility of State employees for the retiree health care credit. Allows individuals who defer receipt of their retirement benefit to receive the health care credit. Allows VRS to recoup its reasonable costs associated with administration of the health care credit program from the Department of Personnel and Training.	None
HB 1746 Armstrong	Allows prior service credit to be purchased by any vested member who served as a uniformed law enforcement officer at any time between 1964 and 1981 in any town in any county with a 1990 population of between 55,000 and 60,000, provided that the county belonged to VRS at the time, that the member reentered service in a VRS covered position, and that the member has not withdrawn his accumulated contributions.	None
HB 1760 Armstrong	Repeals provision that required a teacher to return to a covered position within one year of involuntary, unpaid maternity leave occurring prior to 7/1/74 in order to receive up to two years of prior service credit at no cost. Provides up to five years of prior service credit, at not cost to members, to full time employees of the General Assembly who previously were employed by General Assembly on a temporary basis. Cost of first five years of additional service credit to be paid for by employer at a rate of fifteen percent of salary. Provision effective until 8/30/95	Insignificant
SB 686 Reasor	This bill moves existing statutory language, authorizing local school divisions to borrow from the VRS for capital projects at a rate established by the VRS Board of Trustees from Title 15.1 to Title 22.1 of the *Code of Virginia.* The VRS Board of Trustees retains full discretion in determining whether to invest in bonds issued by political subdivisions.	None
HJR 474 Ball	Requires Department of Personnel and Training to study the efficacy of establishing and administering a health care plan for retired State employees, teachers, and political subdivision employees.	No estimate prepared

Source: JLARC staff analysis of 1995 legislation

Retirement Legislation Passed by the 1996 General Assembly and Signed by the Governor

Bill Number Sponsor	Key Provisions of Legislation	Estimated Fiscal Impact
SJR 5 Walker	Constitutional amendment to define VRS funds as separate and independent trust funds. Requires that benefits be funded using methods which are consistent with generally-accepted actuarial principles.	None
SB 5 Walker	Provides for the placement of the proposed constitutional amendment in SJR 5 on the ballot for voter consideration in November 1996.	None
HB 1406 Putney	Codifies the five-year phase in period for prefunding the COLA, as proposed in the 1996-98 Executive Budget. Twenty percent of the additional cost necessary to fully prefund the COLA shall be paid beginning in FY 1998, with 100 percent of the additional cost to be paid in FY 2002.	$499.7 million in State costs over five years to prefund COLAs for State employees belonging to VRS, and to cover State's share of costs to prefund COLAs for teachers. $310.8 million in local costs over five years to cover local share of costs to prefund COLAs for teachers. State costs to prefund COLAs for SPORS and JRS not estimated.
HB 862 Putney	Makes the retiree health care credit for teachers mandatory, with the cost to be paid for by the State. Provision becomes effective July 1, 1998.	$11,972,200 annually
HB 901 Diamonstein	Allows vested members with at least 25 years of service to purchase up to three years of additional service credit -- at five percent of salary -- for prior active military service or service in the retirement system of another state. If localities wish to opt out of this provision, they must notify VRS by 7/1/96.	State: $814,420 annually (including State share of teacher costs) Local: $439,120 (for local share of teacher costs)
SB 296 Stosch HB 1407 Putney	Extends State health insurance and group life insurance benefits to certain State employees (whose positions are exempt from the provisions of the Virginia Personnel Act; or who are agency heads appointed by a State board, commission, or council;) who are involuntarily terminated and retire under the 55/20 unreduced benefit provision. Extends the 55/20 unreduced benefit provision -- in the event of involuntary termination -- to the following types of local employees: urban county executive, county manager, and town manager. If localities wish to opt out of this provision, they must notify VRS by 7/1/96.	Negligible due to limited applicability

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Retirement Legislation Passed by the 1996 General Assembly and Signed by the Governor (continued)

Bill Number Sponsor	Key Provisions of Legislation	Estimated Fiscal Impact
SB 389 Walker HB 884 Diamonstein	Authorizes the University of Virginia Medical Center to establish one or more retirement plans for its current and future employees. Employees currently participating in a UVA- sponsored plan through the optional retirement program may remain in the current plan, or transfer to any new plan that is established and continue to receive their current contribution rate. Employees currently in VRS may remain there, or elect to join any new plan. New employees will be covered by any new plan . Medical center contributions to the new plan will be eight percent of creditable compensation.	No impact specified for VRS
SB 607 Lambert HB 1524 Hall	Authorizes the Medical College of Virginia Hospitals Authority to establish one or more retirement plans for its current and future employees. Employees currently participating in a MCV- sponsored plan through the optional retirement program may remain in the current plan, or transfer to any new plan that is established and continue to receive their current contribution rate. Employees currently in VRS may remain there, or elect to join any new plan. New employees will be covered by any new plan . MCV contributions to the new plan will be eight percent of creditable compensation, or the contribution required by the State if the employee were a member of VRS, whichever is less. Any new plan established shall offer the same investment opportunities as the current optional retirement program for teaching, administrative, and research personnel. Employees who elect to transfer from VRS to a new plan shall have assets equal to the actuarial present value of their accrued benefit transferred to the new plan on their behalf.	No impact specified for VRS
SB 440 Lambert HB 774 Heilig	Authorizes VRS to enter into an agreement with any political subdivision which has a defined benefit pension plan that is not supplemental to VRS, in order to provide for portability of pension benefits between VRS and the political subdivision. Portability would be achieved by permitting a plan member to purchase service credit, with the purchase financed by a transfer of assets from one pension plan to the other. The plan that the individual is leaving would calculate the amount of assets to be transferred, and the plan that the individual is joining would calculate the amount of service credit that could be purchased with those assets.	None
HB 895 Croshaw	Permits VRS members to defer retirement under the 50/10 provision.	None

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Retirement Legislation Passed by the 1996 General Assembly and Signed by the Governor (continued)

Bill Number Sponsor	Key Provisions of Legislation	Estimated Fiscal Impact
SJR 66 Colgan	Requires the Department of Personnel and Training to continue its study of the efficacy of establishing and administering a health care plan for all beneficiaries of VRS and for retired State employees participating in the optional retirement program, the cost of which will be borne by the beneficiaries. The Joint Commission on Health Care shall assist the Department of Personnel and Training in the study.	None
HJR 207 Cantor	Requests VRS to use its best efforts to place alternative investments with Virginia-based venture capital funds, and requires VRS to report to the 1997 General Assembly on it efforts, results, and future plans in this area.	None specified
SB 484 Lambert	Requires that an application for VRS retirement benefits must contain a statement, properly acknowledged by the applicant's spouse, consenting to the selected benefit payment option.	None
SB 536 Marsh HB 660 Van Yahres	Clarifies that blind individuals employed in workshops by the Department for the Visually Handicapped are not State employees. Authorizes the department to contribute five percent of compensation to a defined contribution plan for those individuals who elect to participate.	Five percent of compensation of eligible individuals electing to participate in the defined contribution plan.
Appropriation Act Language	Authorizes the VRS Board, with assistance of the Department of the Treasury, to arrange for financing of the unfunded liability associated with the costs of retirement benefits of local school boards that elected to participate in the 1991 Early Retirement Incentive Program	None specified
Appropriation Act Language	Requires VRS to pay the health care credit to all eligible retirees, including those covered by a health benefits program sponsored by the Commonwealth of Virginia.	None specified
Appropriation Act Language	Requires VRS to assist the Joint Commission for the Management of the Commonwealth's Workforce in its study on development of a short-term disability program for State employees.	None specified
Appropriation Act Language	Requires VRS to assist the Joint Commission for the Management of the Commonwealth's Workforce in its study of the health benefits program administered by the Department of Personnel and Training.	None specified

Source: JLARC staff review of 1996 legislation, budget documents, and legislative impact statements.

Sections of the *Code of Virginia* Applicable to the VRS

Virginia Retirement System Feature	Title 51.1 Code of Virginia Section
Governance - Board of Trustees appointment and responsibilities	124.20 - 124.22
Governance - Advisory committees' appointment and responsibilities	124.25 - 124.26
Investment authority	124.30 - 124.35
Director	124.22
Chief Investment Officer - qualifications and responsibilities	124.24
Exemption of assets from taxation; execution and assignment of benefits and assets	124.4
Membership in retirement system	125, 128 - 129, 202, 302
Membership - Eligibility of certain higher education and teaching hospital employees for optional retirement system	126 - 126.1
Membership - Participation of political subdivisions in retirement system	130 - 136
Membership - Authority of political subdivisions to provide SPORS-equivalent benefits to their law enforcement employees	138
Creditable service	140 - 141, 203, 303
Purchase or granting of prior service credit	142 - 143
Member contributions, refunds from member contribution accounts	144, 147, 161
Board of Trustees responsibility to certify employer contribution rate, employer contributions	145, 148, 204
Service retirement benefits	152 - 155.1, 205-206, 305 - 306
Disability retirement benefits	156 - 160, 209, 307-308
Supplemental benefits for SPORS	208
Disability retirement - Medical Board	124.23
Cost of living adjustment	166
Pension benefit payment options	165
Maximum benefit limits	168
Survivor benefits	162 - 164, 207
Group life insurance program - eligibility	502 - 504, 507
Group life insurance program - amount of coverage	505
Group life insurance program - employee and employer contributions	506, 508, 514
Group life insurance program - beneficiary designations	511
Group life insurance program - optional insurance coverage	512
Authority to administer a disability insurance program	514
Deferred compensation program	600 - 605
Social security for State and local employees	700 - 706
Local (non-VRS) retirement systems	800 - 823

Source: JLARC staff review of the *Code of Virginia*.

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