JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION
OF THE VIRGINIA GENERAL ASSEMBLY

Review of the State's Group Life Insurance Program for Public Employees

A Report in a Series on the Programs and Performance of the Virginia Retirement System

REPORT OF THE
JOINT LEGISLATIVE AUDIT
AND REVIEW COMMISSION

Review of the State's Group Life Insurance Program for Public Employees

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

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Preface

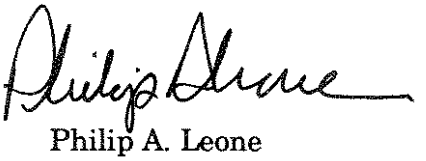
Senate Joint Resolution 251 of the 1993 Session requested the Joint Legislative Audit and Review Commission (JLARC) to complete a study concerning the State's group life insurance program for public employees. The study was to focus specifically on the funding and rate structure of the program, which is administered by the Virginia Retirement System(VRS). To complete the study, JLARC staff were assisted by Alexander & Alexander Consulting Group, Inc., which was hired as a consultant.

Overall, JLARC staff and its consultant found that the program's benefits are generous and well funded, and its premium rates are low compared to the programs of most other states. In addition, the performance of the VRS' actuary and the Life Insurance Company of Virginia in connection with the program has been reasonable and effective. However, JLARC's consultant concluded that the suspension of premiums during FY 1994 has decreased the amount of prefunding, and reduced the actuarial soundness of the program.

To strengthen the funding of the group life insurance program, this report recommends several actions. First, an independent evaluation should be performed prior to altering the program's funding methods or rates. Second, VRS should adopt a formal funding policy for the program. Third, VRS should perform another actuarial valuation prior to July 1, 1994 to identify the full effect of the premium suspension and to evaluate alternative funding approaches.

The consultant found that the uniform rate structure currently used by the program is consistent with the program's mandatory nature, objectives, and benefit design. The report recommends that VRS continue using a uniform rate structure. However, if benefit design changes are considered in the future, a non-uniform rating structure should be carefully assessed.

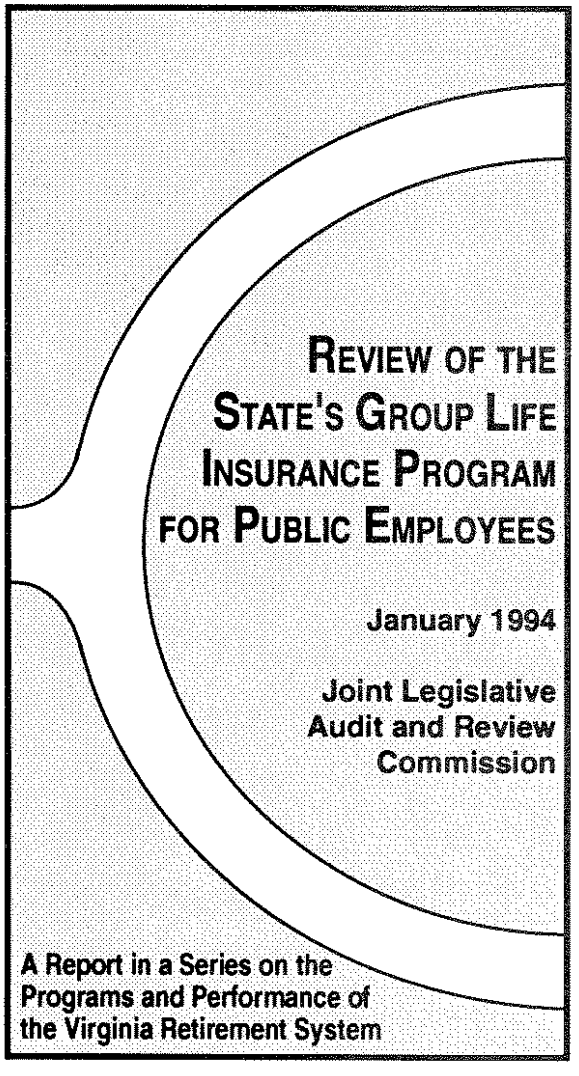
On behalf of the Commission staff, I wish to acknowledge the support and cooperation of the Virginia Retirement System Board of Trustees and staff, as well as that of the Life Insurance Company of Virginia, in the completion of this study.



Philip A. Leone
Director

January 25, 1994

JLARC Report Summary



The Virginia group life insurance program provides benefits for natural and accidental death. Participation in the VRS program is a condition of employment. Approximately 338,000 active and retired employees are covered under the program which has a total of $16.2 billion of life insurance in force. Program benefits are generous compared to most other states. All employees pay the same rate regardless of age, gender, or health status. Virginia is one of only two states which prefund their life insurance benefit in advance of retirement. VRS contracts with the Life Insurance Company of Virginia to underwrite the coverage and to administer several aspects of the program.

Senate Joint Resolution 251 of the 1993 Session directed JLARC to study the funding and rate structure of group life insurance program administered by the Virginia Retirement System. This report summary briefly references study findings and recommendations. Detailed explanations are contained in the text of the report.

Prefunding Enhances Actuarial Soundness of the Program

The degree of "actuarial soundness" is a measure of the probability that the program is likely to pay all benefits as promised. Several factors affect actuarial soundness, including the level of assets, contributions, and prefunding. Prefunding enhances the security of the program benefits. However, the current premium holiday has decreased the amount of prefunding, and reduced the actuarial soundness of the program.

The following recommendations are made:

- *An independent evaluation should be performed prior to changing the program's funding methods or rates.*

- *Study changes in benefits or rate structure prior to implementation.*

Funding Policy Requires Modification

Virginia's group life program is better funded than the programs of most other states, but is not funded at an amount recommended to be actuarially sound. More-

over, the program's funding objective should not be based on a certain asset level or partial funding.

The following recommendations are made:

- *VRS should adopt a formal funding policy for the program.*
- *Prefunding of the program should continue.*
- *VRS should fully fund the future benefits of all program participants.*
- *Any funds taken from the program should be replaced to maintain actuarial soundness.*

Review of 1992 Actuarial Valuation

The 1992 actuarial valuation performed by VRS' actuary was conducted accurately. However, the VRS actuary identified 21,000 non-VRS participants that had previously been excluded from actuarial valuations of the group life program.

The following recommendations are made:

- *VRS should perform another actuarial valuation prior to July 1, 1994, to identify the effect of the premium holiday and to evaluation alternate funding approaches.*
- *VRS should review the mortality assumption for active employees.*

Program Has Been Well Administered by Insurance Company

Life of Virginia has been the insurer and administrator for the group life program since the program's inception. VRS has never placed the group life contract out for bid. Overall, Life of Virginia administers the program in a reasonable and effective manner.

The following recommendation is made:

- *VRS should place the group life contract out for bid every five to seven years.*

Uniform Rate Structure

A majority of states have uniform rate structures for their programs. This structure is generally consistent with a mandatory program, and with the VRS program's current objectives and benefit design. The uniform rate for the plan is also comparatively lower than other group rates in the market.

The following recommendations are made:

- *VRS should continue using a uniform rate structure.*
- *If benefit design changes are considered, a non-uniform rating structure should be studied.*
- *When any plan changes are implemented, objectives and results should be carefully monitored.*

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COMPANION DOCUMENT TO THIS REPORT

The research for this study required the combined efforts of JLARC staff and a specialized consultant (information on the consultant is provided on the staff page at end of the report). The consultant's findings are utilized and summarized throughout this report. In addition, a separate companion report which was prepared by the consultant is available at the JLARC offices:

- *Evaluation of the Virginia Group Life Program,* Alexander and Alexander Consulting Group, December 1993, 47 pages.

I. Introduction

Senate Joint Resolution 251 of the 1993 Virginia General Assembly directs the Joint Legislative Audit and Review Commission (JLARC) to conduct a study of the group life insurance program administered by the Virginia Retirement System (VRS). In particular, the mandate calls for an evaluation of the organization, funding, and rate structure of the group life insurance program for State and local government employees.

Established in 1960, the group life program provides insurance benefits in the event of natural or accidental death for State government employees, State Police officers, General Assembly members, judges, local school boards, and employees of political subdivisions. All insured persons must be under the age of 70 prior to enrollment. No medical examination is required in order to receive coverage. Virginia, along with Wisconsin, is one of two states which prefund the life insurance benefit in advance of retirement. When compared to programs in other states, the VRS group life insurance benefits are among the most generous.

Participation in the VRS program was made a condition of employment for State employees in 1962. In fiscal year 1993, approximately 338,000 active and retired employees were covered under the group life program which had a total of $16.2 billion of life insurance in force. It is the policy of the Commonwealth of Virginia to pay the State employee premium contribution. However, not every participating political subdivision makes the entire premium payment for its employees. By law, retirees do not pay premiums. Since the program's inception, VRS has contracted with the Life Insurance Company of Virginia to underwrite the coverage and to administer several aspects of the program.

In the past few years, several concerns have been raised about Virginia's group life program. In particular, the funding status of the program has been called into question. Rapid growth in the amount of program assets and rapid decline in premium rates have led to speculation that the group life program is over-funded.

Another concern involves the uniform rate structure of the program. All employees pay the same rate regardless of age, gender, or health status. Questions have been raised as to whether the uniform rate is competitive with that of other large employers and whether this structure unfairly treats certain groups of employees.

JLARC procured the services of professional actuarial consultants to assess the soundness of the group life insurance program's funding and rate structure. Their professional assessment constituted a major portion of JLARC's review. The report examines the sufficiency of the group life insurance program's funding and rate structure.

ORGANIZATION OF THE VIRGINIA GROUP LIFE PROGRAM

Fundamentally, a group life insurance policy allows participants to benefit from coverage while placing the burden of financing the plan either partly or entirely on the employer. It is generally believed that group policies enable a larger population to participate in a plan at a lower cost than if each person had to purchase individual coverage. This is because group participation permits risk-sharing and reduced administrative expenses incurred by the insurance underwriter by spreading risk and cost over a greater number of lives.

The VRS group life program was adopted on July 1, 1960. The VRS Board of Trustees (the Board) was given the authority to purchase group insurance policies in order to insure eligible employees. The program has experienced steady participant growth, increasing at an average annual rate of 3.4 percent from FY 1983 to FY 1993. The number of retirees participating in the program increased approximately three times as fast as the number of active employees. The 11.6 percent average annual increase in the amount of insurance in force from 1983-1993 reflects this growth of participants in the VRS group life program.

Currently, in addition to all State agencies, 422 political subdivisions participate in the VRS group life program. The covered subdivisions consist of 89 counties, 34 cities, 61 towns, and 120 school boards. The remaining 118 subdivisions include housing authorities, various commissions, and other governmental organizations.

Participation Requirements

Participation requirements constitute an integral component of any group life insurance program. In most cases, participation requirements attempt to control occurrences of adverse selection which could result in unstable rate fluctuations or higher premiums for the group as a whole. Adverse selection could affect factors such as group size, age composition, and expected actuarial losses.

As an illustration of adverse selection, suppose Employee X accepts a job with Firm ABC, which has a death benefit plan in which employees who participate pay some of the cost. Employee X believes he is quite healthy and opts not to participate in the plan. Three years later when Employee X discovers that he has a fatal disease, he decides coverage in the plan would be wise. If the plan had no restrictions governing Employee X's ability to enter it under these circumstances, actuarial losses might become excessive over time.

Generally, insurers prefer larger groups to smaller ones in order to minimize the likelihood of severe adverse selection. It is also considered best from an underwriting perspective if there is a flow of persons into and out of the group, so that younger members replace the older members over time. In this way, the average age of persons in the group stays fairly constant, and loss experience tends to be more stable. Participation

requirements are a way of ensuring a steady membership mechanism so that severe fluctuations in group size and, hence, group premiums are avoided.

Mandatory Participation in VRS. Membership in the VRS group life program is a condition of employment for full-time State employees. In the case of participating political subdivisions, an eligible employee may waive coverage at the time his or her employer is first covered by the VRS group life program. Otherwise, participation in the group life insurance program is mandatory until employment is terminated. Consequently, unless a person becomes employed or is already employed with a political subdivision at the time of its initial membership into VRS, the option to forgo coverage does not apply. Furthermore, an employer's membership in the VRS group life insurance program is permanent. An entity does not have the option to cease its association with the program.

Participating Employees. Approximately 272,000 active employees and 66,000 retired employees were covered by the VRS group life program in fiscal year 1993. Eligible employees include State government employees, State Police officers, judges, General Assembly members, and employees of local school boards and political subdivisions. Persons working on a temporary or part-time basis are not eligible.

Program Benefits

As noted previously, one of the primary functions of a group life insurance program is to provide benefits to its members at the lowest possible rate. If an employer's goal were merely to provide for funeral or burial costs, all participating employees could be given a flat amount of coverage, such as $10,000 or $15,000. Usually, however, the amount of group life insurance provided for a particular worker is a function of either salary or job classification.

Employers interested in linking the size of the death benefit more closely to individual financial situations often use a multiple earnings approach. With this method, the basic death benefit for a particular employee is a specified multiple of that person's salary for the year. Employers commonly use multiples of one or two.

Benefit Based on Earnings. Virginia makes use of the multiple earnings approach. The VRS group life program provides insurance for natural death with benefits equal to twice the member's salary rounded to the next highest $1,000. If the member's death is accidental, the benefit is double the natural death coverage. For example, assume a covered employee's salary is $15,200. Rounded to the next highest thousand, it would be $16,000. When this amount is doubled, the benefit would be $32,000 for natural death. For accidental death, the benefit would be $64,000 ($32,000 death benefit, plus $32,000 accidental death benefit).

In addition, the program provides accidental dismemberment and accidental blindness coverage. For the accidental loss of one limb or sight of one eye, the member receives a payment equal to his or her salary rounded to the next highest thousand. For

the loss of two or more limbs, or the total loss of eyesight, the member receives a payment equal to his or her salary rounded to the next highest thousand and doubled.

After retirement an employee's life insurance coverage continues. However, the amount of coverage decreases by two percent each month until it reaches 25 percent of the original value. Accidental death and dismemberment coverage does not continue after retirement.

Cost of Group Life Coverage. Section 51.1-506 of the *Code of Virginia* specifies that employee premium contributions may not exceed $0.70 per month per $1,000 of annual salary. The premium rate is officially the same for all participating employees. However, actual employee contribution rates can vary by employer because often the employer will pay all or part of the premium for the employee. For example, the State pays the full premium for all of its employees but several political subdivisions do not. Retirees, by law, do not pay premiums.

Cessation of Benefits. Upon termination of employment, all group coverage ceases. In this case, the individual has the option of converting to an individual policy at non-group rates. Required in all states, the conversion clause provides that when an employee is no longer eligible for the group coverage (usually due to the termination of employment), he or she has the right to convert the coverage to an individual policy without having to prove insurability.

The Role of Private Life Insurance Companies

Section 51.1-501 of the *Code of Virginia* requires that VRS life insurance policies be carried with a life insurance company authorized to do business in the Commonwealth of Virginia. The company must be able to efficiently administer and service the insurance coverage for the retirement system.

Life Insurance Company of Virginia. Since its inception, the VRS group life program has been administered by the Life Insurance Company of Virginia (LOV). As the insurer, LOV underwrites the insurance risk, investigates and pays claims, and provides general administrative support. VRS, on the other hand, maintains coverage records for the employees, and provides claims forms to beneficiaries (Exhibit 1).

Reinsurance of VRS Group Life Program. The Board may require that the group life policies be reinsured with a life insurance company organized under the laws of and authorized to do business in the Commonwealth of Virginia. Reinsurance is the process under which LOV, as the primary insurance carrier for VRS, contracts with other life insurance companies to assume a portion of the overall risk. At this time, approximately 63 percent of the total life insurance risk is reinsured by two Virginia domiciled companies. They are the First Colony Life Insurance Company and the Home Beneficial Life Insurance Company. Hence, in a situation in which LOV is unable to pay claims, approximately 63 percent of the VRS benefit liability would be covered by these two companies.

Exhibit 1

Division of Duties Between VRS and Life of Virginia

VRS Duties

- ❑ Maintain membership and coverage records
- ❑ Provide claims forms to beneficiaries

LOV Duties

- ❑ Payment of all active and retired employee life insurance claims
- ❑ Investigation and payment of Accidental Death and Dismemberment claims
- ❑ Litigation relating to any claims matters
- ❑ Monthly individual claims listing and financial reports
- ❑ Assistance in legislative drafting and cost projections in connection with proposed program changes
- ❑ Administrative assistance in preparing forms and literature used in connection with the program
- ❑ Annual review and experience reports
- ❑ Periodic actuarial studies and reports

Source: VRS.

FUNDING POLICY OF THE VIRGINIA GROUP LIFE PROGRAM

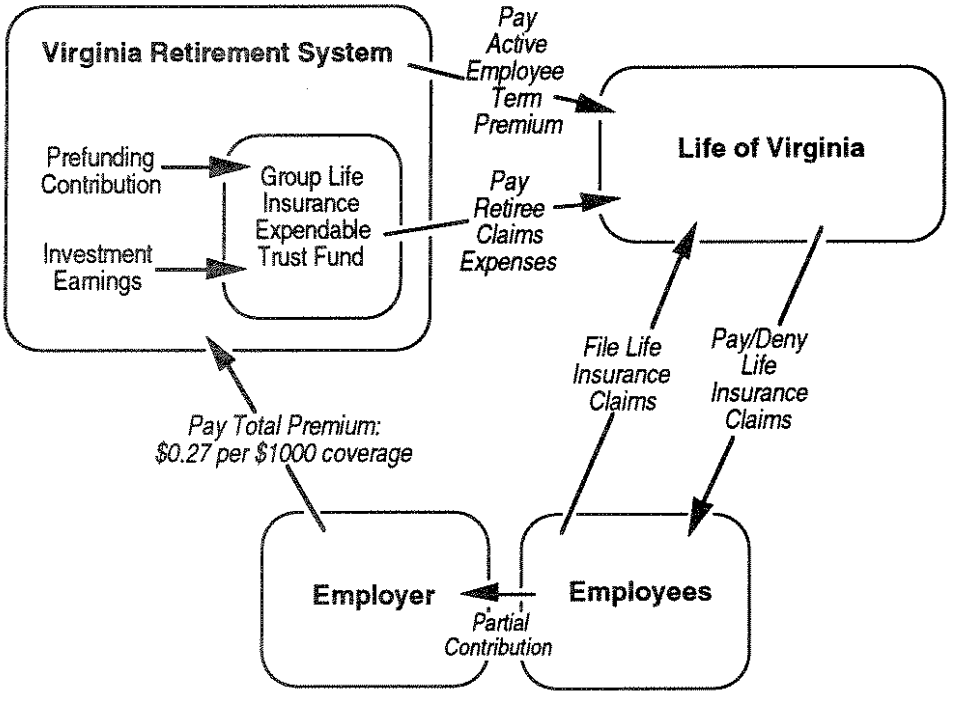
The group life program is paid for through a funding mechanism consisting of premium payments from participating employers, plus investment returns on those contributions. Revenue from these sources is used to pay for program benefits and expenses (Figure 1). The total group life premium is the sum of the separate premium components for active and retired employee coverage. Since FY 1990, the total actuarially-determined premium has decreased from 42 cents to 27 cents per $1,000 of life insurance coverage. However, due to a 1993 Appropriations Act provision, the premium for FY 1994 is suspended.

Premium Components

The premium for insuring active employees during any given year is determined by LOV and is based on the program's claims experience of the prior year. The premium for insuring retired employees is determined based on a periodic actuarial valuation

Figure 1

Administration of VRS Group Life Insurance Program



Note: Premium for FY 1994 is zero due to change in actuarial prefunding period mandated by 1993 Appropriation Act. FY 1994 premium had been actuarially determined to be $0.27 per $1000 of coverage.

Source: JLARC staff analysis of information provided by VRS and Life of Virginia.

performed by the VRS actuary. Both premium components are subject to final approval by the VRS Board.

Differences in Active and Retiree Funding

Coverage for active employees is fully insured by LOV. In other words, LOV assumes all of the insurance risk. Active coverage is paid for on an annual term basis through monthly premium payments to LOV. As protection against materially adverse claims experience, LOV reserves the right under the policy to collect premiums of up to 25 percent more than the established rate.

Retiree coverage is paid for in advance of retirement age through employer and employee contributions to the VRS group life expendable trust fund. As of June 30, 1993, trust fund assets totaled $595 million. However, retired employees are still technically insured, on a "cost plus" basis, by LOV.

Payment of Active and Retiree Death Claims

LOV is responsible for paying claims resulting from the death of both active and retired employees. LOV bills VRS for the amount of retiree claims paid, plus expenses and profit. LOV bills retiree claims two months after they are paid.

In FY 1993, VRS validated and collected $64 million in contributions, and remitted $54 million to LOV for premiums and claims. At the end of the year, LOV and VRS reconcile premium and claims payments, expenses, and profit charges for both active and retired employees. Billable expenses include premium taxes that LOV has paid to the State. In addition, LOV bills VRS a risk charge for active employees. However, there is no risk charge for retired employees.

Monitoring of Program Funding

There appears to be some perception within State government, largely due to the rapid growth of the group life trust fund, that the group life insurance program is over-funded. The group life trust fund has indeed increased rapidly, with assets more than doubling from FY 1986 to FY 1993. However, in assessing funding, consideration must be given to several factors beyond current asset levels.

The defined life insurance benefit prescribed by the *Code of Virginia* is an obligation of the State that must be paid to the beneficiaries of all covered employees at the time of death. The actual liability for benefits is unaffected by any modifications to either the method or timing of program funding. Therefore, current assets of the group life program must be viewed within the context of projected liabilities. In addition, consideration of assets must include not just current assets, but also future contributions to the plan.

VRS Pre-funding Objective. Historically, the funding objective of the Board for the group life insurance program has been to accumulate sufficient assets to cover the post-retirement death benefit liabilities of those active employees who are within 15 years of retirement. A pre-funding objective is one of the most important elements of an actuarially sound plan since it increases the benefit security of the program.

Standard Actuarial Reserve Basis. In late 1992, the VRS actuary recommended that the Board adopt a more actuarially sound funding objective. The actuary recommended that program funding adhere to the standard actuarial reserve basis, under which the program would begin to pre-fund the post retirement benefit of all covered employees at the time of their initial employment. While the Board's prior funding objective dealt strictly with asset levels, this new objective dealt more directly with required contribution rates. The VRS Board adopted premium rates based on this approach to pre-funding in January 1993.

Change in Pre-funding Period Results in Premium Holiday. Item 587 of the 1993 Appropriations Act reduced the actuarial period for the pre-funding of retiree death benefits from 15 years to ten years. In other words, the Appropriations Act

required VRS to have sufficient assets to cover the post-retirement death benefit liabilities of those active employees within ten years of retirement. This reduction was made retroactive to July 1, 1992.

The reduction in the pre-funding period, by effectively lowering the required asset level, enabled the State to reduce the premium rate for FY 1994 from 27 cents per $1000 of coverage to zero. This action suspended, for the biennium, the Board's decision to adopt the standard actuarial reserve funding basis recommended by its actuary.

RATE STRUCTURE OF THE VIRGINIA GROUP LIFE PROGRAM

By their nature, group life insurance plans cover more than one person; therefore, it is not an individualized mechanism. Underwriting, the selection by the insurer of which risks to insure, is based on group characteristics rather than on evidence of insurability for individuals within the group. Membership in a group that has been formed for purposes other than obtaining insurance often is sufficient evidence of insurability for an insurer. For example, if an employee is well enough to work, he or she likely will be judged to be well enough to be insured without passing a medical examination.

Therefore, the premise of a group life insurance policy hinges on the spreading of risk over the entire covered population. A group policy is not normally used as a vehicle to underwrite certain subsets of groups. Yet, some critics of the present system support a more individualized life insurance program for VRS. Consequently, the feasibility of a non-uniform rate structure must be carefully assessed.

Uniform Rate Structure

Like most state group life programs which utilize mandatory participation requirements and noncontributory plans for their state employees, the VRS group life insurance program incorporates a uniform rate structure. All employees are charged the same rate regardless of age, gender, health status, or any other risk factor. Recently, concerns regarding the equity of the rate structure have been expressed by at least one political subdivision.

Equity Aspects of the Uniform Rate Structure. Some doubts have been expressed regarding how equitable the uniform rate structure is for young and healthy employees. It has been maintained that these presumably lower risk individuals could obtain identical coverage outside of the program at a lower rate. Critics claim that the uniform rate structure results in these younger, healthier employees subsidizing older, riskier individuals. They maintain that younger employees of political subdivisions which do not pay the full amount of the employee group life premiums are burdened by a rate structure which does not recognize their lower risk factor.

Non-Uniform Rate Structure

A non-uniform rating structure attempts to refine pricing by individual participants. In this scenario, higher-risk individuals pay a higher premium than low risk individuals. Several aspects such as age, smoking status, and other risk factors are taken into account in the determination of an individualized rate. A medical examination may also be required.

Non-uniform Rate Structure Results in a Different Program. Because of the variance in premium payments, mandatory participation requirements would not normally apply with non-uniform rating. Indeed, in some circumstances, such as involving supplemental benefits, coverage could be denied to an individual with a high risk factor. In addition, under this type of rate structure, it is common that an employer would utilize a contributory plan in which the employee pays a portion of the premium.

STUDY MANDATE

The 1993 Virginia General Assembly passed Senate Joint Resolution 251 (Appendix A). This resolution directs JLARC to study the group life insurance program administered by VRS.

This study mandate required JLARC to examine whether the uniform rate currently charged to insured employees and their employers are competitive with those rates paid by other large employers. It also directed JLARC to compare the VRS program with other group life insurance programs administered or sponsored by other state governments, analyze the funding of the group life program, and determine whether the current program meets the life insurance needs of eligible employees in an efficient and nondiscriminatory manner.

STUDY APPROACH

The JLARC review of the VRS group life insurance program was designed to address two broad areas: (1) the actuarial soundness of the group life program; and (2) the equity and efficiency of a uniform rate structure, given the program's current benefit design.

Based on these concerns, the following issues were addressed:

- Are the program's contribution rates and funding approach appropriate to meet its benefit obligations?
- Does Life of Virginia administer the group life program in an effective manner?

- Is VRS' use of a uniform rate structure appropriate given the current benefit design of the program?

- How feasible is a non-uniform rate structure given the program's current benefit mechanism?

- How does the VRS group life program compare to group life insurance programs sponsored by other states?

This study did not examine the design of the group life insurance benefit itself. Issues concerning the appropriateness of the structure and amount of VRS life insurance coverage were outside the scope of this study. Rather, given the current life insurance benefit, this study examines the adequacy of program funding to ensure provision of the benefit over the long term. In addition, given the current benefit, the study evaluates the appropriateness and feasibility of a non-uniform rate structure, as opposed to a uniform rate structure.

Because of the complexity and scope of this review, two approaches were used to complete the evaluation. First, JLARC staff examined the mechanism of the group life insurance program that has been employed by VRS over the years, as well as the different options that are available to the program.

Second, in light of the special expertise required when evaluating actuarial soundness and premium rate issues, JLARC procured the services of Alexander & Alexander Consulting Group, Inc. (Alexander & Alexander), a consulting firm with expertise in these areas, to assist in the analysis of these issues. The next section of this chapter provides a general discussion of the main research activities conducted for this study.

Review of the Administrative Structure of the VRS Group Life Program

A key issue regarding the administrative setup of the group life program is whether the relationship between VRS and LOV is appropriate and efficient. In examining this issue, the study team conducted structured interviews with LOV and VRS staff who work closely with the group life program. Alexander & Alexander accompanied JLARC staff on some of these interviews and analyzed historical information on the relationship between VRS and LOV. In addition, the study team conducted a fifty state survey which contained questions regarding the administrative structure and the role of private life insurance companies in other public sector programs. Responses were received from 47 states.

Review of the Actuarial Soundness of the Group Life Fund

Part of JLARC's evaluation of the group life program included an in-depth study of the actuarial soundness of the group life fund. Alexander & Alexander completed one part of this task by performing an actuarial valuation of the group life program.

Alexander & Alexander also performed a 75-year projection of program assets and liabilities. Moreover, Alexander & Alexander determined whether the rate-setting process employed by LOV and the VRS actuary is appropriate and fair to the participating employers. JLARC staff analyzed historical data and conducted structured interviews with VRS staff and the VRS actuary on the funding status of the group life program.

Review of the Uniform Rate Structure of the Group Life Program

Another area of JLARC's review addressed the uniform rate structure utilized by VRS. JLARC staff conducted and reviewed the fifty state survey which contained questions on other state programs' rate structures as well as the questions on administrative design. Alexander & Alexander conducted an analysis of the appropriateness of the current rate structure given the benefit structure of the group life program. JLARC's consultant also addressed the concept of a non-uniform rate structure and the effects its implementation would have on the program as a whole.

REPORT ORGANIZATION

Chapter II of this report provides an assessment of the funding policy of the group life program, and evaluates the appropriateness of the rate-setting process. Chapter III examines the key issues related to the retirement system's use of a uniform rate structure given the group life program's current benefit design and participation requirements.

II. Evaluation of Group Life Insurance Funding

Before the appropriateness of contribution rates and program funding can be evaluated, a complete understanding of actuarial soundness is important. Actuarial soundness is simply a measure of the probability that a financial security system will pay all benefits as promised. On the whole, the benefits of the State's group life insurance program are better funded than benefits of the majority of other public and private group life plans. Therefore, all else being equal, Virginia's program is more likely to pay all of its promised benefits than are group life programs in other states. However, Virginia's program has historically been funded based on an arbitrary target in which assets cover liabilities for only a portion of participants. Thus, the program has not been following a funding objective that would prefund all participants' benefits over their working years.

Despite operating on a partial funding basis, favorable investment and mortality results have helped the program approach a level where benefits for all participants can be prefunded if contributions are made as recommended by the VRS actuary. However, because the recommended premiums are not being paid during the current biennium due to a premium holiday, the program's assets have been reduced to a level lower than the level assumed by the actuary when recommending funding rates.

Alexander & Alexander examined the appropriateness of VRS actuarial policies and practices concerning the group life program, including the effectiveness of LOV in underwriting and administering the group life policy. It appears that LOV has effectively administered the policy, but some policy changes regarding the rate setting and funding objectives of the program are warranted. This chapter presents the findings and recommendations resulting from Alexander & Alexander's review of the actuarial soundness of the group life program.

THE MEANING OF ACTUARIAL SOUNDNESS

There is considerable misunderstanding concerning the operation of Virginia's group life insurance program. Before any conclusions can reasonably be reached regarding the status of program funding, it is essential to understand what is meant by an "actuarially sound" plan. It is also important to understand how effective the plan has been in relation to its goal of adequately prefunding future retiree death claims.

The degree of "actuarial soundness" is a measure of the probability that a financial security system is likely to pay all benefits as promised. For many years, actuarial literature has cautioned against using the term "actuarial soundness" in an absolute sense, such as to imply that a financial security system will surely meet its obligations. Several factors affect actuarial soundness, including the level of assets, contributions, and prefunding, as well as security objectives, market conditions, the actuary's judgment, and prefunding methods.

Assets Are Only One Measure of a Plan's Actuarial Soundness

Both assets and liabilities must be validly modeled before reaching a conclusion about the actuarial soundness of a plan. For example, one plan with a billion dollars of prefunding assets but extremely large obligations or liabilities may be less actuarially sound than another system with only ten thousand dollars of assets and few liabilities.

Future Contributions Must Be Considered. Similarly, both current assets and future contributions must be considered in assessing the degree of a plan's actuarial soundness. A system that has few assets, but a strong probability of being able to pay very large ongoing contributions, may well be more actuarially sound than a plan with extensive assets, but which has difficulty making the smallest of future ongoing contributions because of a very weak financial condition.

Degree of Benefit Security Affects Actuarial Soundness. Actuarial soundness is also defined relative to a financial security system. For example, a governmental pension plan prefunded solely by participant contributions might have a lesser degree of actuarial soundness than a "pay-as-you-go" system that also has a governmental guarantee of solvency. Under the latter arrangement, the employee benefits are guaranteed to be paid on time. This guarantee increases benefit security and, in turn, enhances actuarial soundness.

Prefunding Improves Actuarial Soundness of a Plan

Generally, the greater the amount of benefits that are prefunded, the more actuarially sound the plan. That is because the probability of making payments is usually increased with prefunding, since assets are on hand to pay benefits. The amount of assets that result from prefunding contributions grow with interest, which helps reduce the need for future contributions. An alternative arrangement, wherein benefit payments are dependent on possible contributions to the program in the future, is not as actuarially sound. Various prefunding methods are designed to amortize the present value of future benefit payments. This is usually done over the employee's working lifetime, according to the pattern of amortization payments specified by the actuarial cost method.

Actuaries Use a Variety of Prefunding Methods. Any one of a number of prefunding payment patterns can be used, although actuaries have developed a smaller number of typical funding methods that represent a systematic way to prefund future payments. All of the methods provide for varying degrees of actuarial soundness, as they reflect different probabilities that plan benefits will be paid in the future.

An extremely actuarially sound plan would already have sufficient assets on hand to pay for all current and future benefit needs for all current and projected participants. It would also have some sort of guarantee that funds cannot be used for other purposes. At the other extreme is a plan with no assets and very high rates required in the future, which may not have a high probability of being paid.

A pay-as-you-go plan can to some degree be actuarially sound if the plan has sufficient ability and willingness to pay all required benefits. However, the degree of actuarial soundness depends on the likelihood that large amounts of future funds will in fact be used to pay for benefits instead of being used for other purposes.

Asset Levels Reflect Benefit Security, Not a Funding Objective

The presence of assets tends to increase the likelihood that future payments will be made. However, the amount of assets by itself is not the determinant of the actuarial soundness of a plan. The amount of assets, though, is sometimes used as an indicator of how protected participants are upon plan termination, as the assets can be used to pay for benefit payments upon termination. Historically, the Virginia group life plan has looked at the level of assets compared to the liability for participants within 15 years of retirement, and more recently, within 10 years of retirement.

However, the current level of assets may be more of a reflection of the age of the plan or participants, rather than the actuarial soundness of the program. A goal of having assets equal to the liability of current participants within 15 years of retirement is not, strictly speaking, an actuarial funding method. It does not address the prefunding contribution rates required to provide future benefits for all participants. Furthermore, to the extent that assets are decreased for other than plan payments, they will need to be replenished or the funding rate will need to be increased to pay future promised benefits.

Professional Judgment Reflected in Assessment

The degree of actuarial soundness reflects the professional judgment of the actuary assessing the probability that the financial security system will pay all future benefit promises. As with any profession, the judgments of actuaries can vary according to circumstances.

PREFUNDING AND RATING ADEQUACY

The difference between the amount of contributions collected by VRS and the amount of premiums and expenses paid by VRS to LOV is placed into, or withdrawn from, a fund established to prefund death benefits for retirees. This fund is called the Advance Premium Deposit Reserve (APDR). On June 30, 1993, this fund had a balance of approximately $595 million and, during the 1993 fiscal year, generated investment earnings of $48 million.

The APDR accumulates a portion of premium contributions collected during an employee's active career. These contributions, along with investment earnings on the contributions, are used to prefund post-retirement death benefits for active employees. Prefunding has several important advantages:

- enhances security of benefit promises;

- permits better quantification of the effects of benefit or contribution changes; and

- provides more equitable intergenerational responsibility.

Ideally, the amount of prefunded assets or reserve is such that when added to estimated future contributions and investment income, the reserve will be sufficient to pay all estimated future claims and expenses. A partially funded plan is not ideal in the sense that the current reserve, when supplemented by future recommended contributions and investment income, is not estimated to be sufficient to pay future claims and expenses for all participants in the plan.

With the Virginia group life program's partial funding objective and the "premium holiday" declared by the General Assembly through fiscal year 1994, the adequacy of the fund has been reduced. Therefore, additional contributions are recommended to improve the actuarial soundness of the program.

Premium Rate Reductions Have Been Based on Valid Factors

Between FY 1990 and FY 1993, the actuarially-determined premium rate decreased from 42 cents to 27 cents pre $1,000 of life insurance coverage. This sharp decrease raised some concerns that the program had kept premiums at artificially high rates for quite some time. However, the reductions reasonably reflected the emerging actual versus projected experience based on the prior actuarial assumptions. The historical pattern of reducing rates from valuation to valuation was primarily caused by a number of specific factors. These include:

- the overall trend of improved mortality;

- very favorable investment returns versus expected returns; and

- new entrants to the plan who although generally younger and healthier, contribute the one uniform rate.

VRS Actuary Has Recommended Additional Funding

Prior to 1993, VRS typically assessed the reasonableness of overall program funding relative to the partial 15-year funding objective of the plan. This objective sought only to have sufficient assets to meet the liabilities of current participants within 15 years of retirement.

In January of 1993, the VRS actuary pointed out to VRS that there was a $28 million surplus of assets over liabilities for participants within 15 years of retirement.

Soon thereafter, the actuary reversed itself and identified a $29 million deficit of assets based on the 15-year partial funding objective. The reason for the deficit was that the earlier valuation had not included benefit liabilities for those employees who do not participate in the VRS pension plan.

Moreover, reinforcing the fact that assets alone do not represent a funding objective, the actuary also pointed out that the fundamental actuarial reserve definition would require prefunding contributions over an employee's entire years of service. VRS' actuary concluded that the fund had approximately a $75 million deficit compared to this actuarially sound level.

The VRS actuary has consistently provided VRS with information regarding the asset level compared to liabilities for participants within 15 or 10 years from retirement. However, the valuations have continued to recommend funding rates based on the concept of prefunding benefits for all participants over their working years. Thus, the valuation's recommended rate levels were generally independent of how the current assets compared to liabilities for participants within a certain number of years from retirement.

Legislation Waiving Premiums Reduces Actuarial Soundness of Program

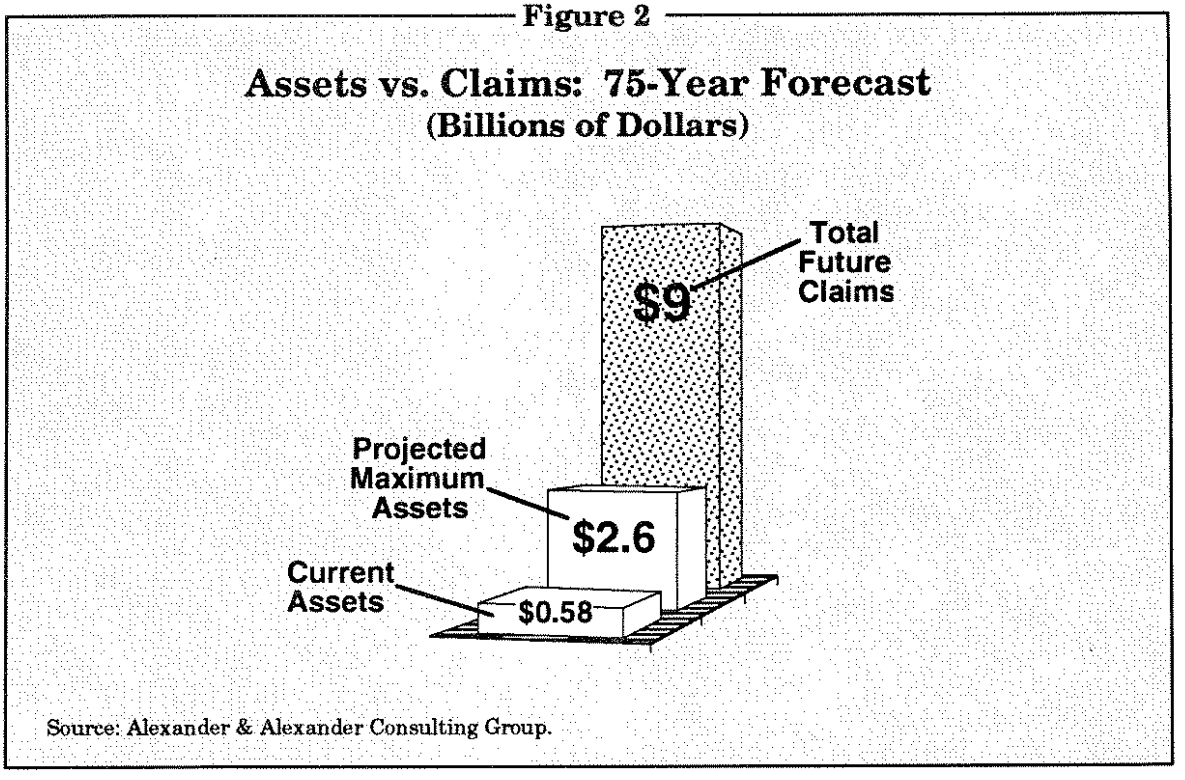
The "premium holiday" was legislated after it was confirmed with the VRS actuary that fewer assets would be needed if the VRS wanted to have sufficient assets to meet the termination liabilities of only those participants currently within 10 years of retirement.

Although historically funded based on an objective that only partially prefunds a plan, the plan's prefunding level exceeds that of most private and public funds. Still, ultimately, the claims will need to be paid, regardless of the funding approach taken. That is, even if no prefunding existed, future funds would need to be found in order to pay all death claims as they occur.

To gain a better understanding of the adequacy of the fund balance, a 75-year forecast of the Virginia Group Life Insurance plan experience was conducted. The forecast showed that, while the approximate $580 million of assets seems very large, it is small compared to the future $9 billion of benefit payments that will become due during the period, and the expected $2.6 billion level assets should reach if the fund wants to pay all claims for all current participants (Figure 2).

JLARC's consultant determined that, prior to any reduced assets or premium holiday, the trust fund had sufficient assets to fund all future claims for existing active and retired employees. If funding had continued on the recommended basis by VRS' actuary, then the assets, with accumulated interest, would reach a projected peak of approximately $2.6 billion dollars in the year 2027. This $2.6 billion of prefunded dollars, when combined with investment income on the fund and supplemented with future contributions, would be sufficient to pay all future claims for all current participants, with no funds remaining at the end of the 75-year period.

Figure 2



Source: Alexander & Alexander Consulting Group.

Premium Holiday Reduced Funding Adequacy. As a result of the premium holiday discussed previously, the plan has lower contributions and assets than those identified in the June 30, 1992 valuation. While the reduced assets are anticipated to be able to provide the expected future obligations for participants currently within 10 years of retirement, insufficient assets and rate levels now exist to provide future benefits for those participants currently not within 10 years of retirement. Over the 75 years studied, approximately $9 billion in future retiree insurance payments must be made to current program participants.

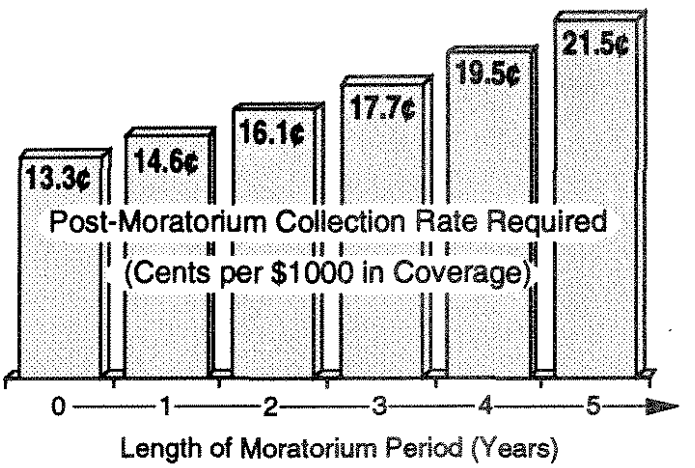
Due to the premium holiday, future rate increases or replacement of assets will be necessary for the plan to pay all of its future promised benefits. Figure 3 illustrates the impact on required rates caused by varying the "premium holiday" period. The longer the premium holiday remains in effect, the more future contribution rates will have to increase in order to maintain the same degree of actuarial soundness.

Funding or Rate Changes Need Thorough Review Prior to Implementation

Any legislative action should be preceded by an independent formal actuarial review, statement of the planned change, and estimate of the financial impact of the change. Although Virginia does not, some states, such as North Carolina, require a formal actuarial note before any plan change is written into statute. For example, for any premium holiday, the intent and impact of either changing the funding policy or temporarily deviating from the required asset or rate levels should be clearly identified. Moreover, the impact of the change on the degree of actuarial soundness of the plan, and

Figure 3

How the Length of the Contribution Moratorium Will Affect Future Funding Requirements



Source: Alexander & Alexander Consulting Group.

the impact on future rate levels should be clearly distinguished from the impact on the asset level. The asset level simply reflects termination adequacy. In addition, special care should be taken to determine the impact of any action modifying benefits or considering non-uniform rating structures under the plan. Such changes can make projection of future prefunding results more difficult.

Recommendation (1). **An independent evaluation, clearly identifying the intent and impact of any change in funding policy, should be performed before any legislative action is taken to change the plan's funding methods or rates.**

Recommendation (2). **Before changes are made in plan benefits or in the non-uniform rating structure of the program, a study should be made to determine the full impact of the change.**

FUNDING POLICY

There is no statutory guidance on how the group life plan should be funded. The current funding is typical of the funding of similar plans, but is less than the amount recommended to be actuarially sound. Some confusion appears to exist over the needed funding objective and the level of current assets for certain participants. The funding objective should not be based on a certain asset level or partial funding. Rather, the recommended objective is to provide benefits for all participants.

Program Is Better Funded than Most Other Public and Private Plans

The asset levels, which had been growing partly because of favorable plan gains, still exceed those of most typical group retiree life programs that do not use prefunding. As previously discussed, Virginia is one of only two states which prefund their group life insurance programs. The majority of private and public groups do not prefund their group life retiree benefits at all (Figure 4).

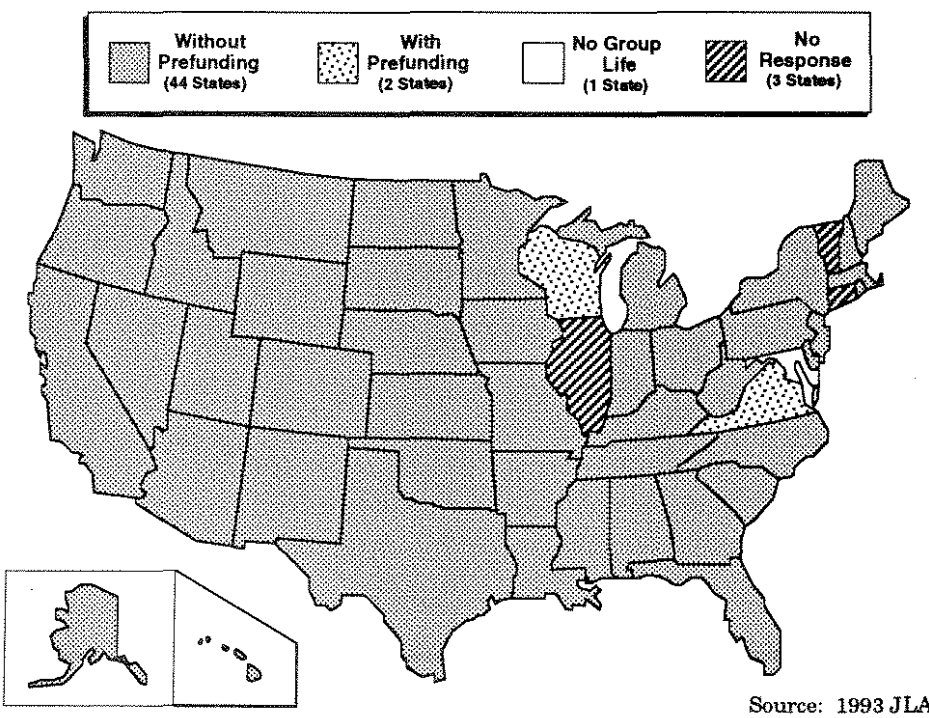
Current Funding Practice is Inconsistent with Recommended Funding Objective

As discussed previously, the VRS actuary has advised VRS several times that an actuarially sound funding basis requires funding beyond the plan's historical partial funding practice. The practice of partial funding simply compares assets to liabilities for participants within a certain number of years from retirement.

Furthermore, the decision to reduce the plan assets by legislating a premium holiday, to reflect a modified goal of having assets sufficient to fund only those participants within 10 years of retirement, is not consistent with the funding recommendation of the actuary. The actuary's recommendation is to fund the program at a rate that spreads the costs of all participants over their working years. The suspension of premiums also reduces the security of plan benefits upon termination of the program.

Figure 4

Types of Funding Methods Used by the States



Source: 1993 JLARC survey.

Whenever assets are reduced without either reducing the benefit promises or increasing the future contribution rates, the reduced assets will need to be replaced sometime in the future and the degree of actuarial soundness of the plan funding is also reduced.

Certain Asset Levels Should Not Be the Funding Objective. The level of assets in comparison to participants within a certain number of years of retirement is not a measure of actuarial soundness in itself and should not be a funding objective. Thus, altering the assets does not change the funding objective or cost method but simply affects the plan's ability to make payments.

Moreover, having sufficient assets for those current participants within 15 years of retirement, assumed to be at age 47, does not mean that all future participants will have their liabilities prefunded by age 47. Rather, it means that those participants currently under age 47 have no prefunding. Prefunding begins when employees reach age 47. Post-retirement benefits for employees are not fully funded until they reach retirement age. As a result, those participants currently age 46 will have virtually no amounts prefunded for them next year when they reach age 47.

Stated another way, the funding objective or method determines the rates and emerging asset levels. The emerging asset levels simply reflect the degree of security available upon termination and help reduce the need for higher contribution rates in the future. The actuarial soundness or probability of the plan to pay promised benefits, generally increases with both higher rates and assets.

Funding Method Should Consider Entire Service Years of All Participants

The group life program should use a funding method that fully funds future benefits over the entire service years of all participants. Moreover, if the funding objective is retained but assets reduced for other reasons, such as to reduce the desired level of assets available upon termination, the actuarial soundness of the plan is reduced. Therefore, any funds taken from the program need to be replaced in the future by cash or contributions.

Using Partial Funding by Age Can Lead to Arbitrary Fluctuations. It is not common practice for public or private organizations to target fund their program on a partial basis that compares assets to liabilities for certain participants. The use of a particular age as a prefunding objective can also lead to yearly fluctuations in results as the age of the population changes.

Recommendation (3). **The Virginia Retirement System Board of Trustees should adopt a formal policy regarding rate-setting and funding objectives, and should comment on future legislative activity regarding changes in the rates or funding approach.**

Recommendation (4). **Prefunding of the group life program should continue based on a consistent funding objective, which provides that all**

active participants can expect to receive future benefits based on future contributions expected under the plan.

Recommendation (5). **The Virginia Retirement System Board of Trustees should use a funding method for the group life program that fully funds future benefits over the future contributions for the entire service years of all participants.**

Recommendation (6). **Once the Virginia Retirement System Board of Trustees establishes a funding objective, if assets are reduced for other reasons, any funds taken from the group life program should be replaced in the future by cash or contributions in order to maintain the same degree of actuarial soundness.**

REVIEW OF ACTUARIAL VALUATION PROCESS

Alexander & Alexander determined that the 1992 actuarial valuation performed by VRS' actuary was conducted accurately. However, the VRS actuary identified approximately 21,000 non-VRS participants that had previously been excluded from actuarial valuations of the group life program. Alexander & Alexander recommends that another actuarial valuation be performed in order to properly assess contributions, funding objectives, and previously excluded program participants.

Actuarial Valuation Calculations Performed Accurately

Alexander & Alexander performed an independent actuarial valuation of the group life insurance program. This was done in order to evaluate the program's June 30, 1992 actuarial valuation in terms of the reasonableness of its data, assumptions and methodology. The results of Alexander & Alexander's independent valuation matched the VRS actuary's to a degree which indicated that the valuation was performed accurately and in accordance with generally accepted actuarial principles and practices. All data used by Buck Consultants were verified as being reasonable and consistent with 1992 data on plan census and coverage. Alexander & Alexander concluded that the data, assumptions and methodology used by Buck Consultants were generally reasonable.

Future Valuations Should Include All Participants

Future valuations should include all participants, including employees not participating in the VRS pension plan. Detailed valuation data are needed to accurately project future liabilities and contribution needs. Furthermore, valuations should be performed at least every two years, or more frequently whenever a change in contributions or funding is anticipated. This will ensure a full understanding of the magnitude of impact of any proposed funding change.

Actuary Identified Previously Excluded Participant Data. Subsequent to the 1992 valuation, the VRS actuary identified that approximately 14,000 actives and 7,000 retirees were inappropriately excluded in historical analysis and prior valuations. These excluded participants represent the VRS group life participants who do participate in the retirement system. These participants included employees of the cities of Norfolk, Richmond, and Roanoke, as well as State college and university faculty who are enrolled in the optional retirement program.

Alexander & Alexander reviewed the accuracy of the estimate by the VRS actuary for employees not participating in the VRS only for general reasonableness and consistency, since no detailed valuation data were available to the actuary. The results of this study were similar to VRS actuary's estimates and, within the limits of the data, confirm that the actuary's estimates were reasonable and consistent with the valuation results. Given that the historical valuations, data, and information provided the actuary appear to reflect only VRS participants, it is understandable that the valuation and data were not expanded to include non-VRS participant data until VRS' actuary became aware that non-VRS participants were not included.

Another Valuation Needed to Identify Future Contributions and Funding

Another valuation should be performed before July 1, 1994, to identify the degree of actuarially sound funding that is expected to result from the recent premium holidays, as well as the use of various alternate funding approaches beginning July 1, 1994. This valuation report should be presented to the Board to consider adopting a documented formal policy regarding rate-setting and funding objectives, including how the plan will handle emerging gains and losses under the plan.

In addition, Alexander & Alexander recommends that the Board should comment on any legislative activity to change the rates or funding approach. The comments should identify the impact on rates or funding, and note if the change is an intended change in funding objective, or a deviation from the recommended level of funding or assets.

Recommendation (7): **The Virginia Retirement System Board of Trustees should have another actuarial valuation of the group life insurance program performed before July 1, 1994. The purpose of the valuation should be to identify the effect of the recent premium holiday on the actuarial soundness of plan funding and evaluate various alternate funding approaches.**

Mortality Assumptions for Active Ages Need Closer Review

According to Alexander & Alexander, and also from prior reviews by the VRS actuary, it appears that actual active participant deaths are less than the VRS mortality table would project. Thus, the Board should consider more closely reviewing the mortality assumption for active ages in the group life program. On the other hand, the

actual VRS expected claim ratios for retirees were very consistent, which is a strong reason for maintaining the current composite mortality table for post-retirement ages.

Mortality Rates Show a Decreasing Trend. Alexander & Alexander concluded that, in general, historical claims data are credible and appear to reflect relatively stable claim rates over time, adjusted for population changes. The trend in claim rates has remained steady from approximately $.27 to $.32 incurred claims per thousand dollars of insurance at risk, from 1979 to 1992.

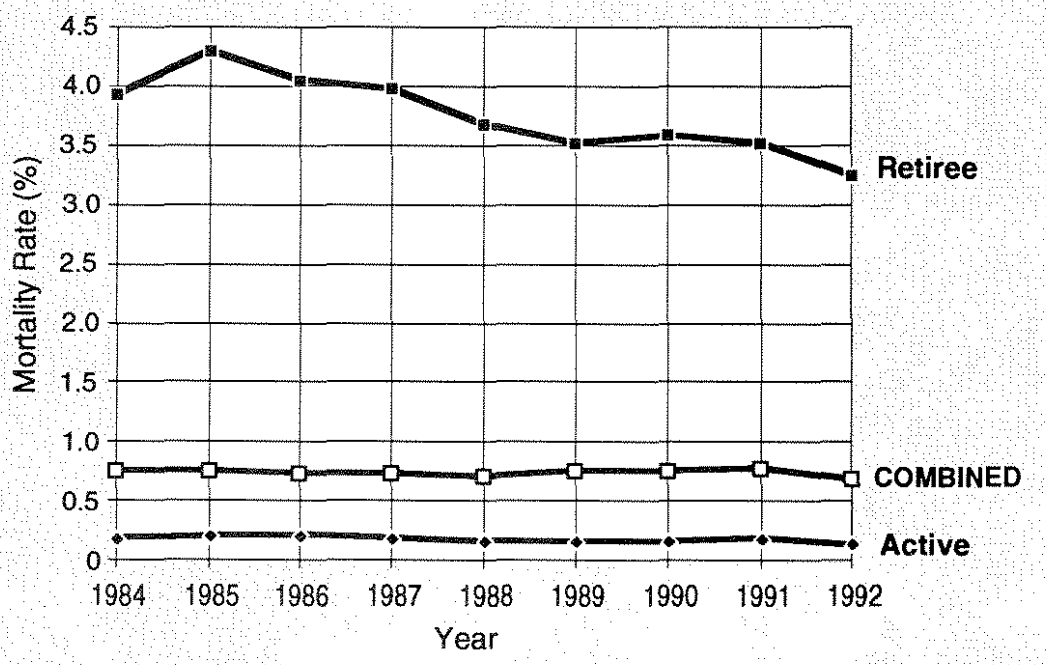
The trend in mortality rates for actives over a similar time period has decreased from approximately .21 percent to .16 percent, with the 1992 results at .14 percent The mortality rate for retirees has declined from a high of approximately 4.3 percent in 1985 to a 1992 level of 3.25 percent.

For actives and retirees combined, the trend in mortality rates is decreasing, consistent with general population mortality patterns and the influx of younger and healthier new entrants into the plan. These mortality results are shown in Figure 5.

Retiree Mortality Assumption Reflects Actual Experience. The overall mortality rate derived from the underwriting analysis, when compared to the composite mortality table rate from each of the pension plan mortality table assumptions, is very

Figure 5

Historical Mortality Rates



Source: Alexander & Alexander Consulting Group.

similar for retired participants. Alexander & Alexander's calculation of the FY 1993 retiree mortality rate, 3.25 percent, is extremely close to the mortality rate from the VRS actuary's mortality table, 3.13 percent, for the same year. The expected mortality rates for current retirees, by employee group, are as follows:

Judges	4.82 percent
State Employees	3.37 percent
Political Subdivisions	3.19 percent
Teachers	2.88 percent
State Police	2.30 percent

Active Mortality Assumption Exceeds Actual Experience. For actives, the mortality table predicts higher expected deaths for actives (.21 percent) than determined by the underwriting analysis (.14 percent). Except for the latest .14 percent result, the underwriting results have ranged from .16 percent to .21 percent. The expected mortality rates for active employees, by employee class, are as follows:

Judges	.57 percent
State Police	.32 percent
State Employees	.23 percent
Political Subdivisions	.23 percent
Teachers	.18 percent

Recommendation (8): **The Virginia Retirement System Board of Trustees should more closely review the group life insurance program's mortality assumption for active ages.**

EFFECTIVENESS OF LIFE OF VIRGINIA

The Life Insurance Company of Virginia (LOV) has been the insurer and administrator for the group life program since the program's inception. Alexander & Alexander assessed the effectiveness of certain aspects of LOV's program administration. Overall, LOV administers the program in a reasonable and effective manner.

LOV Accurately Predicts Annual Death Claims

The approach used by LOV and VRS to pay for active and retiree claims has produced reasonably accurate estimates of the funds needed to pay for annual claims and related expenses. Historical experience has shown the LOV process to accurately project active claims rates and maximize cash flow. VRS' actuary has appropriately used the active premium rates resulting from LOV's contribution and funding practices.

LOV Reserves for Annual Claims are Typical

Alexander & Alexander reviewed reserve information provided by LOV, and the premium factors derived from VRS data. Based on this review, Alexander & Alexander concluded the LOV's derivation of the claims incurred but not paid reserve reflects standard actuarial principles and insurance company margins, actual plan claim payment patterns, and competitive current interest credits.

State Premium Tax is a Large Portion of Program's Non-Claim Expenses

As part of the contract, a significant portion of plan premiums is being paid to the LOV for reimbursement of State premium taxes. This practice is typical of life insurance contracts. It is also a necessary part of an insured contract with tax-free death benefits to the beneficiaries. In FY 1992, VRS reimbursed LOV for $1.2 million in State premium tax payments. The State premium tax rate remained relatively stable from FY 1983 to FY 1992, increasing from 2.31 percent to 2.32 percent.

Rebid of Contract Prudent, But Unlikely to Affect Soundness of Program

Marketing a group life insurance plan, by placing it out for competitive bid, is generally good practice since the plan sponsor can potentially obtain better rates. Although it has been considered and appropriately analyzed, VRS has not placed the group life insurance contract out for bid since 1960. While there is no evidence to suggest that not marketing the plan since inception is improper, marketing a plan from time to time is prudent. This is true even if the cost/benefit results appear negligible, since the bidding process provides continual formal feedback from the marketplace regarding alternatives and competitiveness. On the other hand, marketing does not significantly affect the actuarial soundness of the plan. Furthermore, if periodic independent expert advice is obtained regarding price and non-price issues, the need for periodic marketing can be reduced.

Recommendation (9): **The Virginia Retirement System Board of Trustees should, as a matter of principle, place the State's group life insurance contract out to bid at least once every five to seven years.**

III. Evaluation of the Group Life Insurance Rate Structure

VRS currently sets the premiums for the State's group life insurance program through the use of a uniform rate structure and mandates participation requirements in the program for all employees of participating localities. Specifically, no individual rating factors such as age or smoking status are used to vary the cost of the insurance for any individual. Instead, the State uses group experience rating in which the actual claims incurred by the group influence the rate charged. Because of concerns expressed about the equity of such a mechanism, JLARC's consultant was asked to examine the appropriateness of the program's uniform rate structure and mandatory participation requirements.

Based on survey data collected by JLARC staff, 37 states utilize a uniform rate structure. Moreover, of the 37 uniform rate states, 23 mandate participation. This indicates that programs which utilize one rate for all participants in a mandatory program is representative of the national norm for state group life insurance programs.

According to the consultants of this study, in the operation of a group life program, the rate structure should be tied to the benefit design and objectives of the program. The uniform rate structure is generally consistent with a mandatory program and the program's current objectives and benefit design. It was not within the scope of this study to examine the benefit structure of the VRS group life program. As a result, Alexander & Alexander conclude that adopting non-uniform rating factors under the current program's benefit design and objectives, which includes mandatory participation, would not be recommended.

This chapter presents the findings and recommendations resulting from Alexander & Alexander's review of the rate structure of the group life insurance program. Their review included an evaluation of the current uniform rate structure utilized by VRS. In addition, JLARC's consultant compared the VRS rate structure with those of comparable public life insurance programs. Finally, the feasibility of a change to a non-uniform rate structure was examined.

UNIFORM RATE STRUCTURE

The VRS group life program utilizes a uniform rate structure in which all employees are charged the same rate regardless of age, gender, health status, or any other risk factor. This uniform rating system, which has cost and administrative advantages for the plan, is mandatory for program participants. JLARC's July 1993 survey of state group life programs indicated that the majority of states have a uniform rate structure. In addition, most states with a uniform rate structure have mandatory participation requirements.

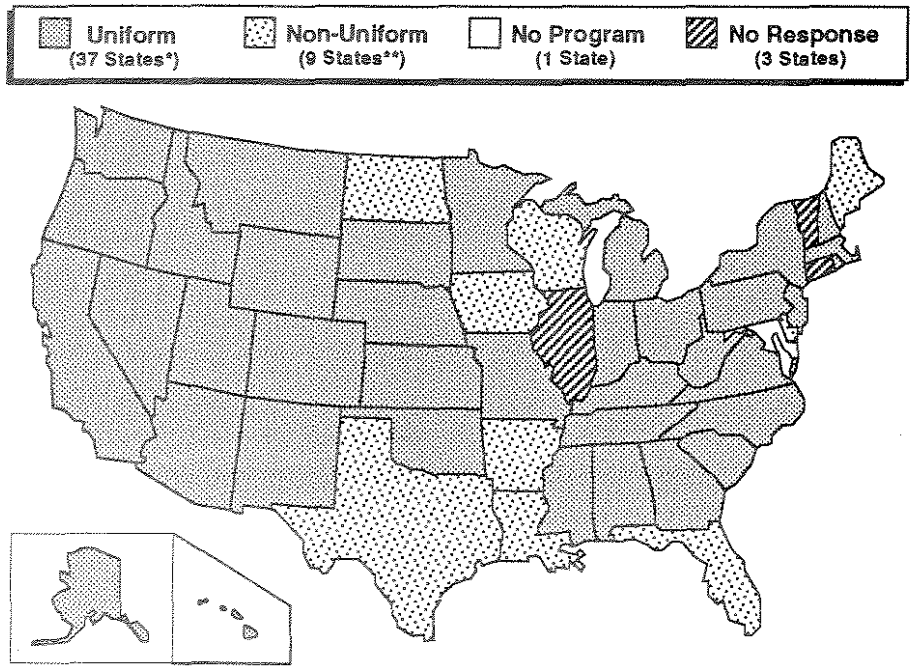
In the past few years, criticism has been voiced about the appropriateness of VRS' rate structure. These concerns address whether the uniform rate is competitive with that of other large employers and whether this structure unfairly treats certain groups of employees. The findings from this study indicate that VRS' rate structure for the group life program is typical of those provided in other states. Moreover, the uniform rate for the plan is comparatively lower than other group rates in the market. However, because not all employers who participate in the VRS group life program choose to pay the full premium cost for each employee, the cost of the program is greater for some than for others.

Common Group Life Insurance Program Provisions

In the course of the study, JLARC staff and Alexander & Alexander conducted several interviews with LOV. Discussions and information related to the non-uniform rating structure issue supported a general conclusion that the rating of the VRS program is typical in many ways to other group life programs that are mandatory. In addition, Alexander & Alexander's review of other national surveys and data from JLARC on state and employer group life insurance programs revealed that mandated participation programs typically require no employee contributions. Most programs do not use a refined rating structure (Figure 6). Hence, the utilization of one rate for all participants in a mandatory program is common.

Figure 6

Types of Rate Structures Used by the States



*Of the 37 states using a uniform rate structure, 23 have mandatory participation.
**Eight states use a voluntary non-uniform structure; one uses a mandatory structure.

Source: 1993 JLARC survey.

Typical Program Design. Alexander & Alexander found that the most typical design arrangement is to provide a basic program on a mandatory basis, with no employee contributions, and with uniform rates for participants. This basic program is then supplemented by a voluntary program in which the participants pay most or all of the cost for additional coverage. The cost of voluntary coverage is frequently based on the age of the insured. Health status rating may be used, depending on the carrier requirements, and the plan's participation, volume, size, and contributions. Other rating factors are not common.

Typical LOV Design. The predominant benefit design utilized by employers who are LOV clients is a basic life program that is noncontributory with 100 percent participation. In addition, there is a supplemental life program that is paid for primarily or exclusively by participants on a voluntary basis. These supplemental programs usually include rating by the age of the participants. Health status underwriting on these voluntary policies may exist, depending on the benefit design, maximum amounts, and participation levels of the group. LOV stated that insurance company rating by gender for group life policies is not legal in Virginia. Moreover, rating for smoking is done for individual life insurance policies, but not for LOV's group life policies.

VRS Design. Several concerns about the uniform rate structure of the VRS program have been raised by one participating political subdivision. Specifically, this political subdivision questioned the fairness of being charged a higher premium than perceived necessary, for coverage many of its employees did not want or need. In addition, the political subdivision objected to paying higher rates than what, it claims, is normally required for low-risk employees.

Several different conditions do apply to the VRS group life program. The most important relates to the payment of premiums. Because of the mandatory nature of the program, the employees must carry a certain amount of basic life coverage; however, unlike other mandatory programs, the amount of the employee contributions on the policy depend on the employer. Therefore, although the same rate is charged by VRS to each participant, it is the decision of the political subdivision, as the employer, to pay a portion of the employee's premium. While the State pays the full premium cost for its employees, some localities pass a portion of this cost along to their employees.

This is an unavoidable consequence of the program's current structure which cannot be altered without imposing a State mandate on participating localities. However, Alexander & Alexander found that LOV's group rate of $0.14 per $1,000 of active life insurance coverage is low compared to average group rates in the market. This low rate reflects the low-risk population of the plan, mainly due to the membership of young, female teachers. The $0.14 rate also includes a low $0.014 rate for accidental death and dismemberment protection.

Current Plan Design Is Easy to Administer

According to Alexander & Alexander and JLARC interviews with LOV, VRS' current plan design and data requirements are simple and easy to administer. LOV

believes the current program is based on the objectives of having an easy-to-understand, economical-to-administer, adequately and soundly funded program, that meets the needs of the majority of the career employees. Providing benefits as a mandatory condition of employment holds down administrative costs by avoiding costly underwriting procedures. In addition, it virtually eliminates anti-selection — the tendency for higher-risk individuals to purchase insurance and for lower-risk individuals not to take advantage of coverage.

Currently, LOV does not receive information from VRS that is related to typical non-uniform rating variables such as smoking habits. Moreover, LOV does not have historical enrollment information by age. While these data would allow for pricing analyses or forecasts based on claims rates by rating variable, its collection and use would undoubtedly increase the administrative cost of the program.

NON-UNIFORM RATE STRUCTURE

A non-uniform rate structure attempts to refine pricing by individual participants. The VRS group life program's current design mandates equal participation, cost, and benefit provisions for individual participants. This design is not consistent with an individualized rating scheme. The current benefit design requires mandatory participation in the program and is administered based on one rate for each participant. Since the program is mandatory, the addition of other rating variables would not significantly change the program's total contributions, claims, participation, or financial results of the program.

Repercussions of a Change in Rate Structure

Alexander & Alexander conclude that adopting non-uniform rating factors under the current program's benefit design, which includes mandatory participation, would primarily increase the administrative costs of the plan, with no other significant anticipated overall financial or benefit impact on the program. In short, the only likely financial plan impact is that the program's internal administrative requirements — such as accounting, system changes, data collection — would be more complex. In addition, employees' understanding of the plan would be more difficult to achieve, and additional administrative costs would likely occur.

Human Resource Implications of a Non-Uniform Rate Structure. To the extent that employers pass on contributions to the participants based on some rating factors, strong participant reactions are likely. Assessing the range of participant reactions to mandatory rating factors was outside the scope of this study. However, considerable dissatisfaction can be expected from those individuals paying significantly more for the same benefits they have today. In addition, potential disagreements about the fairness of selecting certain rating factors over alternative factors would arise.

Although it is not always possible to mandate equal coverage and benefits (as VRS does now) without some complaints, most employers find it extremely difficult to further define higher-risk groups according to some general rating factors, and consequently mandate that the higher-risk participants pay substantially more. For example, many employers would find it very difficult to mandate disability-income coverage for all participants and require the older, higher-risk employees, who may not even want disability-income protection, to pay perhaps five to ten times the average cost.

Feasibility of a Change in Rate Structure for VRS. Given the low rate of employee contributions in the VRS group life plan, and the lack of consistent negative feedback from participants who might benefit slightly from lower contributions, a change in rate structure would probably not be desirable from a human resource perspective. For plan sponsors like VRS that mandate participation in a plan with little or no employee contributions, desire simple and cost-effective administration, and self-fund their actual claims experience, there is little need for using refined rating factors.

In contrast, plan sponsors which provide a large degree of employee choice and contributions, and which insure the risk with an insurance carrier, would most likely utilize rating factors such as age and some health underwriting factors (e.g. smoker/non-smoker). As is the case with any evaluation, the appropriateness of the rating factors depends on the objectives and practical considerations of the program.

Wide Variety of Pricing Estimates in a Non-Uniform Rate Structure. In adopting a non-uniform rating structure, the financial and human resource impact on various employers within the plan is unknown without detailed pricing information such as ages, gender, claims experience, volume of insurance, participation levels, industry classification, and LOV underwriting requirements.

Nevertheless, even if a specific modified benefit design were assumed, the estimates of future pricing would vary dramatically based on several unknown factors, such as:

- Degree of choice permitted
- Required contribution levels and the subsequent cost split between employers and employees
- Claims experienced by VRS for each rating variable
- Any revised contractual financial arrangements
- Transitional policies and practices
- LOV or any new carrier's unique set of actuarial-best-estimate pricing factors, or "manual rates" for each rating factor
- LOV's administrative and underwriting requirements related to the proposed plan

- Communication approach and impact on elections
- Proportion of participants "opting-out"
- Impact on short- and long-term enrollment, utilization, and anti selection under the program
- Financial impact on prefunding the retiree life benefits
- Any new statutory requirements

Benefit design recommendations and speculation about design scenarios were outside the scope of this study. In addition, no data exist to accurately estimate the myriad of pricing factors that might result from any modified program. Therefore, this report does not present any premium rate and cost projections.

Recommendation (10). **The Virginia Retirement System should continue using the current uniform rating structure for the group life insurance program, rather than adopting a non-uniform rating structure.**

Benefit Design Alternatives Could Impact Rate Structure

With appropriate administrative and cost adjustments, LOV maintains that it is flexible and willing to discuss changes in the administration of the program. The current plan is simple and inexpensive to administer, and generally meets the perceived objectives of the plan. However, LOV could require the use of typical non-uniform rating structures, most likely rating by age or some health underwriting, if employee choice is significantly introduced into the program. Hence, to the extent that VRS objectives place a priority on offering a more common benefit design which would provide for employee choice and individualized contributions, a benefit design study, and related non-uniform rating structure study, should be pursued.

A Voluntary Non-Uniform Rate Structure Requires Careful Study

Two important elements of any benefit design or rating structure study are employee research and employer survey of needs. Perspectives on alternative choice and contribution arrangements are also crucial for a well-rounded and complete evaluation. Any voluntary provisions would need to consider the potential impact on the prefunding portion of the program. For example, if individuals or employers were allowed not to participate until near retirement age, a decision would need to be made concerning the equity of contributions from participants with only a few years of program participation.

In addition, any voluntary provisions should carefully consider the potential anti-selection that can result when employers or individuals can elect to join or not to join the plan over time. VRS' current mandatory program does not allow employers to leave the plan once they join. The mandatory nature of the program is valuable because it

allows for prefunding of retiree life benefits. It also avoids a tendency for the healthier groups to leave the plan and thereby increase the rates for the employers who remain in the plan.

Defining Objectives and Monitoring Results

Alexander & Alexander recommend that whenever any benefit design or rating structure changes are made, the plan should carefully document the objectives and anticipated enrollment, claims utilization, anti-selection, and employer/employee contribution forecasts. A process to monitor emerging results with the documented projected results would be very important for the effective management of the program.

Recommendation (11). **If changes are considered in benefit design, to allow more employee choice and contributions based on individual needs, a careful study of the related non-uniform rating structure should be conducted at that time.**

Recommendation (12). **When any plan changes are implemented, objectives and results should be carefully monitored.**

Appendix A

Senate Joint Resolution No. 251
1993 Session

Requesting the Joint Legislative Audit and Review Commission to study the group life insurance program administered by the Virginia Retirement System.

WHEREAS, Chapter 5 (§ 51.1-500 et seq.) of Title 51.1 of the Code of Virginia authorizes the Board of Trustees of the Virginia Retirement System (VRS) to purchase group life insurance policies for eligible state and local government employees; and

WHEREAS, Virginia Code § 51.1-501 directs that the maximum expense and risk charges for such policies shall be consistent with the general level of charges made by life insurance companies under policies of group life, accidental death, and dismemberment insurance issued to other large employers and directs that all eligible state and local government employees receive and pay for such group life insurance coverage; and

WHEREAS, Virginia law further authorizes the Board of Trustees to fix the group life insurance premiums paid by all insured employees and their employers, and the Board has determined that all insured employees and their employers shall pay a uniform rate for such coverage, regardless of an employee's age, health, or other risk of loss; and

WHEREAS, it appears that Virginia is one of the few states in the nation that requires all eligible government employees to pay a uniform rate for such coverage; and

WHEREAS, it appears that the Board has accumulated an advance premium deposit reserve fund under the group life insurance program that may be more than adequate to meet the contingent liabilities of said program and, under Virginia Code § 51.1-514, should be used to reduce premiums paid by employers; and

WHEREAS, lower group life insurance rates paid by state and local government employees and their employers could result in significant financial benefits for many employees, local political subdivisions, and the Commonwealth; and

WHEREAS, there is a need to determine whether the uniform rate currently being charged to state and local government employees and their employers for mandatory coverage is competitive, whether such uniform rate discriminates unfairly against certain classes of employees, and whether the Board is establishing group life insurance rates in a manner that is cost effective for both government employees and Virginia's taxpayers; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Joint Legislative Audit and Review Commission be requested to conduct a comprehensive study of the group life insurance program designed and administered by VRS. The study should include, but not be limited to: (i) whether the uniform insurance rates currently charged

to insured employees and their employers are competitive with the rates paid by other large private and public employers; (ii) how the VRS group life insurance program compares with other group life insurance programs administered or sponsored by other state governments; (iii) whether the excess premiums collected under the VRS program are properly set aside and used exclusively for group life insurance charges; and (iv) whether the current program meets the life insurance needs of eligible employees in an efficient and nondiscriminatory manner.

The Joint Legislative Audit and Review Commission shall complete its work no later than November 15, 1993, and submit its report to the Governor and the 1994 Session of the General Assembly pursuant to the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

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