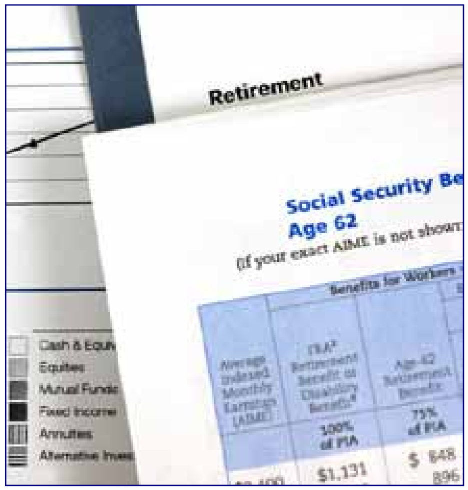
JLARC
JOINT LEGISLATIVE AUDIT
AND REVIEW COMMISSION

REPORT TO THE
GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA



Review of Retirement Benefits for State and Local Government Employees

COMMONWEALTH OF VIRGINIA
RICHMOND

DECEMBER 2011

In Brief

The defined benefit retirement plans administered by the Virginia Retirement System (VRS) are an important part of the total compensation provided to employees and have helped the State remain competitive as an employer, albeit marginally in 2011.

The retirement plans are effective at helping to maintain a stable and qualified public workforce. When paired with Social Security, the benefits provide employees with adequate income in retirement after a full career.

The asset to liability ratio of the plans has declined, which is due partly to the historical tendency for the State to pay less in payroll-based contributions than is necessary to fully cover the costs of the plans. If the trend of paying lower than necessary contributions continues, the existing unfunded liabilities ($19.9 billion in FY 2011) will increase.

The General Assembly has options to modify the plans' provisions to reduce future costs, although benefit reductions could diminish the State's competitiveness. The General Assembly also has options to introduce an alternative plan for employees, and either a defined contribution or a combination plan would have advantages, depending on the State's objectives. Neither is projected to produce substantial cost savings over the next ten years and could result in higher costs.

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COMMONWEALTH of VIRGINIA

Glen S. Tittermary
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January 9, 2012

The Honorable Charles J. Colgan
Chair
Joint Legislative Audit and Review Commission
General Assembly Building
Richmond, Virginia 23219

Dear Senator Colgan:

In February 2011, you requested JLARC staff to conduct a review of the Commonwealth's retirement programs for State and local employees. This report was briefed to the Commission and authorized for printing on December 12, 2011.

I would like to thank the staff at the Virginia Retirement System and the Department of Human Resource Management for their assistance during this study.

Sincerely,

Glen S. Tittermary
Director

GST/mle

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JLARC Report Summary:

Review of Retirement Benefits for State and Local Government Employees

Key Findings

- Public employee retirement benefits are effective at aiding State and local government recruitment and retention of qualified employees. Current benefits allow employees to retire at an appropriate time and with adequate income, when paired with other resources. (Chapters 2 and 3)
- The State's total compensation package is marginally competitive, due largely to relatively low cash compensation for employees, and its competitiveness has declined since 2008. The State's ability to remain competitive is due partially to the defined benefit retirement plans. (Chapter 2)
- The State's overall prudent management of the retirement system, particularly with respect to plan design, has made its fiscal challenges less severe than is the case in many other states. However, employer contributions for several years have been lower than necessary to fully fund the plans' costs. Continuing to contribute less than is recommended will add to the plans' existing unfunded liabilities ($19.9 billion in fiscal year 2011) and require higher future contribution amounts. (Chapter 4)
- Several options to modify the defined benefit programs could reduce future retirement system costs. (Chapters 5 and 7)
- Employees could be provided an alternative retirement plan that is competitive and that could allow many employees to accrue sufficient savings. Either a defined contribution or a combination retirement plan would have advantages, depending on the State's objectives. Should the General Assembly wish to implement an alternative retirement plan, several key components should be incorporated into the plan's design and administration. (Chapters 6 and 7)

RETIREMENT BENEFITS ARE A KEY COMPONENT OF STATE AND LOCAL EMPLOYEES' COMPENSATION

Retirement benefits through a defined benefit retirement plan are provided by the Virginia Retirement System (VRS) to approximately 600,000 active State and local employees, retirees, and beneficiaries. A 2008 study conducted by staff of the Joint Legislative Audit and Review Commission (JLARC) found that retirement benefits are a key component of compensation that contributes to the State's competitiveness as an employer. Since 2008, the General Assembly has modified the benefits and the cost-sharing structure for all four of the defined benefit retirement plans for State employees and for the defined benefit plan for school division employees, such as school teachers. At the request of the JLARC Chair following the 2011 General Assembly Session, JLARC staff reviewed the structure and effectiveness of the retirement plans in order to provide additional information before further significant changes are considered.

RETIREMENT PROGRAMS ARE KEY TO STATE'S COMPETITIVENESS AS AN EMPLOYER

Mercer Provided Analysis for Review

Mercer, which is JLARC's actuary, provided actuarial analysis and support for this review. Mercer's contributions included (i) working papers on key study questions, (ii) analysis of the competitiveness of the State's compensation package to employees as compared to a group of 15 peer employers, (iii) proposals for modifying the defined benefit plans and for introducing an alternative plan, and (iv) analysis of the impact of possible modifications.

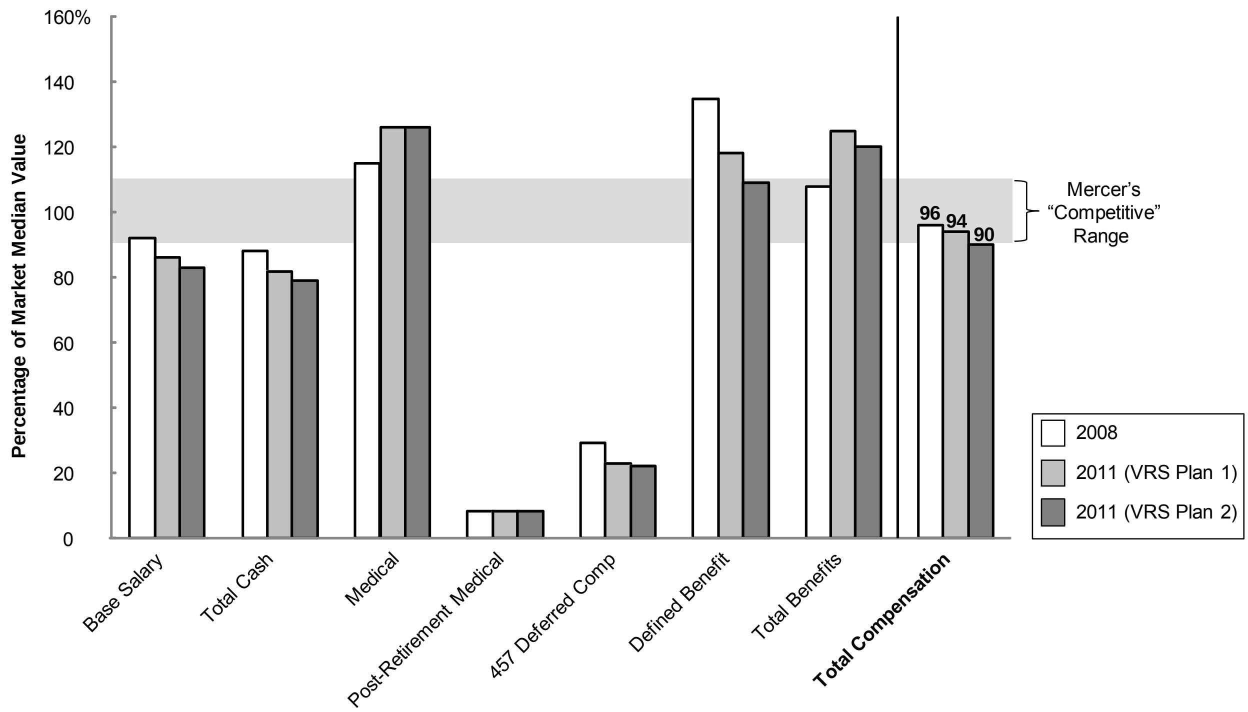
According to Mercer, in 2011, the State remains competitive as an employer, although marginally, because its total benefits package somewhat offsets its relatively low salaries. Mercer found that while the State's total cash compensation is uncompetitive compared to the market median, its total benefits package is above the market median. Mercer partially attributed the competitiveness of the total benefits package to the defined benefit retirement and health insurance plans. Still, the State's total compensation package for new employees was found to be just barely competitive, as shown in the figure on the next page.

In both 2008 and 2011, Mercer's analysis shows that cash compensation is not competitive when compared with the market. Salary is the key element of total compensation, not only because it is the largest component of compensation and has the most direct impact on the satisfaction and motivation of the workforce, but also because the value of many of the employee benefits, including the retirement plans, is affected by salary levels.

…additional benefit reductions without offsetting salary or benefit increases may take the State's total compensation package out of the competitive range for prospective new hires.

A five percent increase in employee salaries was instituted in 2011 to offset the new requirement that employees contribute five percent of their salary toward the defined benefit plans' costs. This salary increase reduced the decline in competitiveness of the State's total cash compensation for employees hired before July 1, 2010. However, for recently hired employees and prospective new hires, total cash compensation has dropped to 79 percent of the market median, 11 percentage points below the bottom of Mercer's "competitive" range. The value of the total compensation package has dropped to 90 percent of the market median, the bottom of Mercer's competitive range. The sensitivity of the total compensation package to cash compensation changes suggests that additional benefit reductions without offsetting salary or benefit increases may take the State's total compensation package out of the competitive range for prospective new hires.

Relative to Its Peer Employers in Each Year, the State's Competitiveness Is Lower in 2011 Than in 2008



Note: Prior to 2010, when VRS Plan 2 was introduced, benefits currently offered in Plan 1 were the only benefits offered to general State employees. Although not shown above, Mercer included dental benefits, leave benefits, and medical flexible spending accounts.

Source: JLARC staff analysis of Mercer's Total Remuneration Comparison Analysis, 2011.

CURRENT VRS BENEFITS CAN PROVIDE ADEQUATE INCOME WHEN PAIRED WITH OTHER SOURCES, SUCH AS SOCIAL SECURITY

According to Mercer, most general VRS members will need to replace between 79 and 99 percent of their pre-retirement income at retirement to maintain a standard of living similar to when they were working. On its own, the current defined benefit plan will not replace this entire amount, and for most employees it will replace no more than half of their pre-retirement salary. However, when combined with unreduced Social Security benefits after a full career of 30 or more years, VRS members could reach, and even exceed, these income replacement targets. Still, according to VRS data, the average State employee chooses to retire prior to accruing the 30 years of service necessary to achieve this level of benefits. As a result, most employees likely do not reach, let alone exceed, these income replacement targets.

FUNDED RATIO HAS DECLINED FOR ALL STATE-SUPPORTED RETIREMENT PLANS

VRS is funded through a combination of investment returns and employer and employee contributions. The most common measure of a defined benefit retirement system's financial health is its actuarial funded ratio, which is the ratio of accumulated assets to actuarial liabilities. A defined benefit plan whose ratio is 100 percent is considered "fully funded." A persistently low, or declining, funded ratio indicates that the employer—in this case, the State and local governments—may not have sufficient assets to pay for the benefits it has obligated itself to provide.

VRS has generally been considered by actuaries to be a financially sound system. The aggregate ratio of assets to liabilities when summed across all State-supported plans has been at or above 80 percent in ten of the past 18 years. Actuaries generally consider a system to be well funded if the funded ratio is at or above 80 percent. However, projections of future funded status indicate that funded ratios are expected to continue to decline in the near term, due largely to the impact of the investment losses experienced in 2008 and 2009. Investment returns are important to the funded ratio of the plans, as these returns have been anticipated to pay for more than two-thirds of the plans' costs. A comparison of the two most recent valuations shows that, from 2009 to 2011 the gap between the VRS liabilities and the assets available to pay for them increased by 69 percent from \$11.8 billion to \$19.9 billion.

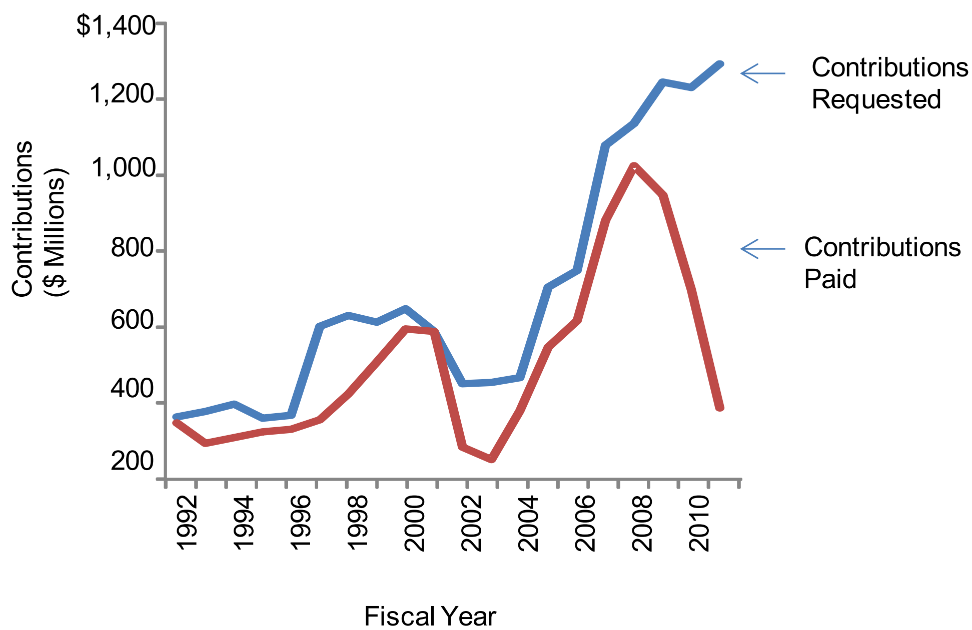
The 2011 actuarial valuation showed that the funded status for the State employees' and teachers' plans had declined to 70.6 percent and 66.6 percent, respectively. VRS projections are that the funded ratios for the State employees' and teachers' plans could reach lows of 63 percent and 61 percent, respectively, in 2013. This experience is consistent with that in other states.

CONTRIBUTION SHORTFALLS ACCOUNT FOR PART OF FUNDING DECLINE

The historical gap between the contribution rates recommended by the VRS actuary and those actually paid by the State has accounted for part of the declining funded status of the plans. Since 1992, the State employees' plan rates have been fully funded in only four years, and the teachers' plan rates have been fully funded in only two years. Similar trends in underfunding the annual required rates have occurred in the other plans. As illustrated in the figure on the next page. As a result, even higher contribution rates are required this year to make up for the shortfall. For example, in the fiscal year 2011 State plans' valuation performed by the VRS actuary, \$1.6 billion in increased liabilities was attributed to the underfunding of the recommended contributions in fiscal years 2010 and 2011.

The VRS actuary recalculated projections of the future unfunded liabilities for the five State-supported defined benefit plans and associated future required contributions under the assumption that 75 percent of the contributions would be paid. (Projections typically assume that 100 percent of the required contributions will be paid.) By those calculations, the unfunded liability for the five State-supported plans would increase by an additional $34.4 billion over the next ten years. This scenario would result in higher contribution rates of approximately $314 million in FY 2022. This substantial difference in the required contribution—even over a relatively short period of time—underscores the budgetary impact of creating larger liabilities for future taxpayers by not fully paying the required contributions annually.

Employer Contributions Paid for State-Supported Plans Have Typically Been Below What Is Needed to Fully Fund Plan Costs



Note: Includes full total contributions made to the teachers' plan, 55 percent of which is paid by the State and 45 percent by the local school divisions on payroll attributable to SOQ-covered positions. Contribution calculations are based on total creditable compensation reported for the fiscal year and are in nominal dollars. These amounts do not include local plans.

Source: JLARC staff analysis of VRS data.

SPECIFIC GOALS COULD BE ESTABLISHED FOR DEFINED BENEFIT PLAN FUNDING

The *Code of Virginia* does not include specific goals that the Commonwealth should seek to achieve and maintain with respect to the financial health of its defined benefit programs. Including such language in the *Code* could improve the consistency with which the plans are funded in accordance with actuarial recommendations. Therefore, it is recommended that the *Code* be amended to identify a minimum acceptable funded ratio for each VRS defined benefit plan.

It is recommended that a fiscal impact analysis be performed if the funded rates are less than those recommended by the VRS actuary. This analysis would be performed as part of the General Assembly's normal process for developing the State budget and would be completed prior to a vote on the budget.

Adopting specific goals for the financial health of the defined benefit plans and funding the plans' costs in stricter accordance with the plans' actuarial recommendations will help ensure that the defined benefit programs are maintained for the current and future public workforce. However, the Commonwealth also has options for modifying elements of these programs to reduce future costs.

OPTIONS FOR MODIFYING COMPONENTS OF THE DEFINED BENEFIT PLANS TO REDUCE STATE AND LOCAL COSTS

JLARC staff identified eight options for modifying the defined benefit plans. Changes could be made to (1) the manner in which benefits are calculated for current and future employees, (2) benefit eligibility requirements for future employees, and (3) cost-sharing requirements for current and future employees. In general, the options analyzed would slightly reduce the benefit guaranteed to future retirees, reduce the amount of inflation protection provided to future retirees, and require plan members to share in a greater degree of the retirement plans' costs and risks. While reducing future benefit obligations for the State and local governments, these changes could have minimal, moderate, or substantial negative impacts on the effectiveness of the plans in terms of their ability to recruit and retain qualified employees and in terms of employees' ability to retire at an appropriate time and with adequate income.

The table on the next page lists each of the defined benefit modifications that were analyzed and the employees and plans to which the modifications would apply. The report discusses the impact of each option on agencies' ability to recruit and retain qualified employees and on employees' ability to retire, and estimates the resulting future cost reductions. The report also discusses which options are not recommended at this time.

The primary objective of these potential modifications to the defined benefit plans is to reduce the associated costs to the State and local governments. The VRS actuary has calculated the cost impact of each of these options. These calculations assume that future annual required contributions will be paid in full. To the extent that the required contributions are not fully funded, cost savings from any plan modifications will be offset by increased liabilities. At the same time, employee benefits will be reduced.

Additionally, while these modifications could reduce costs for future earned benefits, they will not reduce the liabilities the plans have already accrued and which the State is obligated to pay.

Summary of Defined Benefit Modification Options Analyzed

Option	Plans	Employees	Reduction in Plan Costs ($ Millions)
1. Average Final Compensation calculated over 60 months versus 36 months	All	Employees hired before July 1, 2010	$509.5
2. Benefit multiplier decreased to 1.6 percent of Average Final Compensation from 1.7 percent	State employees, teachers, general local government employees	Newly hired	$165.5
3.Cost of living adjustment capped at 3 percent	All	Existing and newly hired	$369.3
4. Cost of living adjustment delayed for retirees choosing reduced retirement benefit	All	Existing and newly hired	$430.4
5. Eligibility for unreduced benefits increased to age 55 from 50	All hazardous duty	Newly hired	$8
6a. Member contributions increased to 7 percent of salary from 5 percent	State employees, teachers, general local government employees	Existing and newly hired	$232.4
6b. Member contributions increased to 9 percent of salary from 5 percent	All hazardous duty and judges	Existing and newly hired	$21.7
7. Employee variable contribution rate, with cap of 8.5 percent	All	Existing and newly hired	$393.4

Note: Effect on plan costs is cumulative through FY 2022 for all applicable plans except for Options 5 and 6 which show the expected cost reductions once all members are under these provisions (20-30 years for Option 5, four years for Option 6, and three years for Option 7). Cost reductions do not reflect the present value of savings and assume three percent annual inflation. Cost reductions are inclusive of both general and non-general funds.

Source: JLARC staff analysis.

Should the General Assembly wish to modify the defined benefit plans, it may wish to consider modifying four components of the plans:

(1) For existing employees, the calculation of average final compensation (AFC) could be made over 60 months versus 36. This provision is already in effect for employees hired on or after July 1, 2010.

(2) For newly hired and existing employees, future cost of living adjustments (COLAs) could be granted based on a formula that provides retirees with an increase in their benefit of the first full two percent increase in the Consumer Price Index (CPI), and then half of each percent increase in the CPI from two to four percent, for a maximum COLA of three percent.

(3) For newly hired and existing employees who choose to retire early and qualify for a reduced benefit, the COLA could be deferred until they reach the age at which they would have been eligible for an unreduced benefit.

(4) For newly hired employees only, future retirement benefits could be calculated based on 1.6 percent of AFC, versus 1.7 percent.

According to Mercer, with any of these modifications, the State and local governments would be able to continue to achieve their recruitment and retention goals. These modifications would maintain the core benefits provided to existing employees, improve the long-term sustainability of the defined benefit plans, and slightly reduce the Commonwealth's future benefit obligations. However, as stated previously, benefit decreases are likely to diminish the competitiveness of the State's total compensation package. Additionally, while these changes would not substantially challenge most employees' ability to retire at an appropriate time and with adequate income, they would have a greater impact on lower salaried employees who may be less able to supplement their future VRS benefits with other savings.

ALTERNATIVE PLANS TO THE DEFINED BENEFIT COULD BE OFFERED, BUT DEMAND IS LIMITED AND STATE COULD EXPERIENCE HIGHER COSTS

The defined benefit retirement plans the State provides are competitive and are achieving the goals identified for State and local government plans. However, optional alternative plans could be offered to give employees more choice and portability, and to reduce the State's financial obligations associated with providing a guaranteed future benefit.

Defined Contribution Option in Survey Modeled After Legislative Proposal

A defined contribution plan modeled after the plan design outlined in House Bill 2410 (2011) was presented to State employees in a JLARC staff survey.

The research and survey results from this review indicate that employee participation in alternative plans would likely be relatively low compared to the defined benefit plans. When offered the irreversible option to switch from the defined benefit plan and into a defined contribution or combination plan, only five percent of respondents to a JLARC staff survey of State employees said they would "probably" or "definitely" switch to a defined contribution plan, and nine percent said they would "probably" or "definitely" switch to a combination plan. Participation rates by newly hired employees could be higher, with at least nine percent expected to choose a defined contribution plan and 17 percent expected to choose a combination plan.

Two alternative plan designs were analyzed that the General Assembly could consider if it determines such a plan would be advantageous for the State. These plans were analyzed as optional alternatives to the defined benefit plan. The table below summarizes these options. Analysis of the potential cost impacts of these alternative plans indicates that the defined contribution plan could result in contribution increases of between one and four percent cumulatively through FY 2022, relative to the contributions required for offering only the defined benefit plan. If implemented for State employees and teachers, the combination plan could result in reduced contributions of just under one percent through FY 2022, although it could also result in increased contributions of about 0.25 percent, depending on participation rates and the level of the State's matching contributions.

Summary of Alternative Plans That Would Be Optional for Newly Hired and Existing Employees

Option	Description
Defined Contribution Plan	Minimum employee contribution of 5 percent, employer match up to 8.5 percent. Total maximum contributions of 17 percent.
Combination Plan	Defined benefit plan with a 1.0 percent multiplier and 4 percent employee contribution. Defined contribution plan with minimum 1 percent employee contribution and maximum employer match of 3.5 percent. Total maximum contributions to defined contribution portion of 8.5 percent.

Source: JLARC staff analysis.

Either a defined contribution plan or a combination plan could offer the State and employees advantages. Both plans could

- provide employees with greater portability of their benefits,
- allow employees to achieve adequate income replacement,
- improve the State's ability to recruit employees who intend to have shorter tenures in State or local government employment,
- provide more stability to State and local government budgeting for retirement plan costs, and
- reduce State and local governments' future obligations for a guaranteed lifetime benefit and increase employee responsibility for retirement security.

The plans' advantages differ depending on the State's recruitment and retention goals and the degree to which reduced future benefit obligations are desired. However, because of the existing unfunded liabilities in the defined benefit plan, introducing an optional defined contribution plan will add to the State's costs over at least the next ten years, whereas a combination plan could result in cost reductions.

There are several components that should be included in an alternative plan's design and its administration, if the General Assembly wishes to implement one. These components, listed in the table on the next page, are recommended to help ensure that the plan is cost effective, attractive to employees, and structured so that employees can achieve an adequate retirement income.

Both of the alternative plan designs discussed above have a defined contribution component. The ability of defined contribution plan participants to achieve an adequate retirement benefit depends on their ability to contribute enough money to their retirement accounts and on the investment performance of their accounts. Considering the State's uncompetitive salaries on average, generating sufficient savings could be a challenge for many employees. Most State employees responding to a JLARC staff survey indicated that they would contribute no more than five percent of their salary to a retirement account. Employees in the lowest salary groups reported that they would be less likely to contribute more than five percent. An analysis of the income replacement potential of the two alternative plans indicates that employee contributions may need to exceed five percent over a full career to allow for adequate retirement income.

Due to the economic decline, balances in 401(k) plans…"have lost 30 percent of their value, reducing the median for those approaching retirement from $78,000 to $56,000."

Even with guidance and education, however, employees are unlikely to accumulate sufficient savings in a defined contribution plan. For example, according to the Center for Retirement Research, due to the national economic decline, balances in 401(k) plans for individuals approaching retirement "have lost 30 percent of their value, reducing the median for those approaching retirement from $78,000 to $56,000." Where retirees need to generate approximately 80 percent of their pre-retirement income *annually*, it is likely that many of these individuals will outlive their retirement assets, need to reduce their standard of living, or both.

Necessary Components of an Alternative Retirement Plan If Such a Plan Is Desired by the General Assembly

Component	Reason	Relevant Plan Design
Optional alternative to defined benefit	Continued enrollment in defined benefit plan is important for its ongoing financial health, given existing unfunded liabilities that must be paid.	Both
Minimum cost to the employee of the current and new plans should be same	Employees less likely to make choice based on immediate out-of-pocket costs.	Both
Mandatory employee contributions, possibly subject to automatic increases	Adequacy of future benefit depends on level of employee contributions. Requires employee responsibility for some portion of benefits.	Both
Comprehensive and ongoing retirement planning education and guidance	Adequacy of future benefit depends on employees' ability to manage investments, and most employees will require ongoing training and assistance.	Both
Investment platform structured to accommodate range of abilities, should include lifecycle funds	Diverse investment platform improves likelihood of employees' success in alternative plan.	Both
Includes disability benefit	Reduces likelihood of adverse selection into the defined benefit plan and improves alternative plan's attractiveness as compared to defined benefit.	Both
Employees permitted one opportunity to change plans within five years of initial decision	Provisions of either plan could change that would make the alternative more attractive. Employees who elect alternative plan may decide they want longer-term State employment than initially thought. Defined benefit plan members may decide that they would prefer greater control and portability.	Defined Contribution
Includes mechanism to ensure continued funding of defined benefit plans' liabilities	Important for ongoing financial health of defined benefit plan and future costs to State of the defined benefit plan.	Defined Contribution

Source: JLARC staff analysis.

Chapter

1 Retirement Benefits Are a Key Component of State and Local Employees' Compensation

In Summary

Retirement benefits are provided through the Virginia Retirement System to approximately 600,000 active State and local employees, retirees, and beneficiaries. A 2008 JLARC study found that retirement benefits are a key component of compensation that contributes to the State's competitiveness as an employer. Since that report, the General Assembly has modified the benefits and the cost-sharing structure for all five of the State-supported plans. In 2011, the General Assembly also considered legislation to implement an optional defined contribution plan for employees to give them more choice in their retirement benefit options and reduce the State's financial risk, but this legislation was not enacted. This study was requested following the 2011 General Assembly Session and its purpose is to review the structure and effectiveness of the retirement programs before further significant changes are considered.

In February 2011, the chairman of the Joint Legislative Audit and Review Commission (JLARC) requested JLARC staff to conduct a review of the Commonwealth's retirement programs for State and local employees. The chairman's request is included as Appendix A. The chairman requested the staff to address nine separate questions regarding the retirement plans, including whether plan design changes are needed and what impact any changes could have. In May 2011, the study request was approved by the Commission.

This study serves as a follow-up to the examination of the Commonwealth's retirement benefits that was included in the 2008 JLARC report, *Review of State Employee Total Compensation*. As such, a major focus of this study was an assessment of the extent to which the retirement plans are achieving their purposes of helping the State maintain a stable and qualified workforce and allowing employees to retire at an appropriate time and with adequate income.

This study was also requested due to concerns about the sustainability and affordability of the current retirement benefits, despite changes enacted by the General Assembly in 2010 and 2011 to reduce future benefit costs. Because the costs of the plans are expected to continue to increase, and the resources available to pay for these costs are expected to remain level or decline, additional benefit modifications are likely to be sought. To inform the General Assembly's further consideration of retirement benefit changes, this report presents JLARC staff's findings regarding the effectiveness of the current benefits and their cost, and presents several options that the General Assembly could pursue to modify the current benefits structure.

Research activities for this study included

- interviews with key staff at the Virginia Retirement System (VRS) and Department of Human Resource Management, as well as other large State agencies;
- interviews with groups of local government employees and teachers from different regions of the State;
- interviews with personnel from retirement systems in other states that have recently considered or enacted modifications to retirement benefits for state employees;
- a survey of more than 5,000 State employees at 170 different agencies;
- a survey of human resource managers at 139 State agencies; and
- interviews with retirement plan design experts at the national level.

In addition, two external retirement plan consultants provided analysis and expert opinion to JLARC staff:

- Mercer (JLARC's actuary) provided analysis regarding the impact of potential plan changes on the workforce and future retirees, and
- Cavanaugh Macdonald Consulting, LLC (the VRS actuary) conducted actuarial analyses to determine the projected impact of potential plan changes on the future costs of the benefits.

More details on the research methods used in the study are in Appendix B.

MOST STATE AND LOCAL EMPLOYEES ARE ENROLLED IN A RETIREMENT BENEFITS PROGRAM

Along with salary, health insurance, disability coverage, and leave benefits, retirement benefits are a key element of compensation for most of Virginia's public employees. The State is required to provide these retirement benefits by Article X, Section 11 of the *Constitution of Virginia,* which states that "the General Assembly shall maintain a retirement system for state employees and employees of participating political subdivisions and school divisions." VRS administers the retirement plans for the State government, school divisions, and most local governments.

Some Localities Do Not Participate in VRS Retirement Plans

Local governments have the option of participating in VRS or establishing their own local retirement plans. Most local governments have chosen to participate in VRS, but some, including Fairfax and Arlington counties, administer their own retirement plans for their local government employees.

Most public employees in the State are covered by one of the retirement plans administered by VRS, and certain groups of public employees have been receiving benefits since the early 1900s. The State began providing retirement benefits to public school teachers in 1908. In 1942, the State began providing retirement benefits to school administration employees and most State employees, and in 1944, employees in political subdivisions (primarily local governments) were allowed to join the system.

VRS serves approximately 600,000 active employees, retirees, and other beneficiaries and ranks as the nation's 22nd largest public or private pension system. As of June 30, 2011, VRS benefits were being paid to 165,520 State and local retirees and beneficiaries. In addition, 338,120 active State and local employees were covered by VRS as part of their compensation. In FY 2010, VRS paid $3.4 billion in benefits, refunds to members, insurance premiums and claims, health insurance credit reimbursements, and disability insurance premiums and benefits.

On average, teachers retiring in 2011 received an annual benefit of $24,359, State employees received an annual benefit of $21,118, and local employees received an annual benefit of $15,446. This annual benefit is determined in part by an employee's average annual salary at retirement. According to VRS data, more than half (60 percent) of the employees who retired in 2011 from the State employees' and teachers' plans had an average annual salary of greater than $50,000 and about one-quarter of those had an average annual salary greater than $80,000. Of the employees who retired in 2011, 27 percent had an average annual salary of less than $40,000 with most making less than $30,000.

Defined Benefit Plans Comprise Largest Portion of State and Local Governments' Retirement Benefits

Defined Benefit Plan

The defined benefit plan guarantees employees who meet the eligibility criteria a regular monthly benefit over the course of their retirement. The amount of an employee's retirement benefit is determined by a formula that factors in the employee's years of service credit and salary.

VRS administers a variety of retirement benefits for the State and local workforce, the largest of which is the defined benefit retirement plan. VRS administers six defined benefit plans for employees: four plans for State employees and two plans for local employees. The bulk of VRS members (71 percent) are in the two defined benefit plans that are administered for local employees – teachers and employees of political subdivisions. State employees are enrolled in one of the other four plans that are administered exclusively for State employees, and account for 29 percent of active VRS members.

Table 1 provides a summary of the membership and key provisions for each defined benefit plan. Two of the provisions in the table—average final compensation (AFC) and the benefit multiplier—are key factors in the calculation of an employee's retirement benefit:

Table 1: Summary of Provisions and Membership of VRS Defined Benefit Plans

Plan Details	State Employees	State Police Officers (SPORS)	Virginia Law Officers (VaLORS)	Judges (JRS)	Teachers	Political Subdivisions/ Local Employees
Membership						
Active Employees	75,820	1,738	9,631	394	146,152	104,385
Retirees/Beneficiaries	52,480	1,289	2,730	459	71,010	37,552
Inactive / Deferred Members	29,934	213	3,501	8	44,488	41,177
Provisions						
Benefit Multiplier	1.7%	1.85%	1.7% or 2.0%	1.7%	1.7%	1.7%
Average Final Compensation	36 months (Plan 1), 60 months (Plan 2)					
Vesting Period	5 years					
Member Contribution	5% of pre-tax salary, paid by employee (paid by employer for JRS members and most school divisions and political subdivisions)					
Cost of Living Adjustment	Matches first 3% increase in CPI + ½ of remaining increase up to 5% max (Plan 1) Matches first 2% increase in CPI + ½ of remaining increase up to 6% max (Plan 2)					
Eligibility for Unreduced Retirement	Plan 1: Age 65 with 5+ years of service or age 50 with 30+ years of service Plan 2: Normal Social Security age with 5+ years of service or when age + service = 90	Age 60 with 5+ years of service or age 50 with 25+ years of service		Age 60 with 30+ years of service or age 65 with 5+ years of service	Same provision as State employees	
Eligibility for Reduced Retirement	Plan 1: Age 55 with 5+ years of service or age 50 with 10+ years of service Plan 2: age 60 with 5+ years of service	Age 50 with 5 years of service		Age 55 with 5 years of service	Same provisions as State employees	
Normal Retirement Age	Plan 1: Age 65 Plan 2: Normal Social Security age	Age 60	Age 60	Age 65	Same provisions as State employees	

Note: Both SPORS and JRS members have a mandatory retirement age of 70. For JRS Plan 1 members, their actual years of service are multiplied by either 2.5 or 3.5 to calculate their total years of service credit. Judges appointed after 1/1/1995 receive the lower weight. For JRS Plan 2 members, if appointed before age 45 their JRS service is weighted by a factor of 1.5, between ages 45 and 54 by a factor of 2.0, and age 55 or older by a factor of 2.5. SPORS members, receive a supplement to their benefit from the age at which they retire until the age at which they are eligible for unreduced Social Security – the supplement is currently set at $1,038 per month. The supplement is discussed further in Chapter 3.

Source: Fiscal Year 2011 actuarial valuations of VRS plans and JLARC staff analysis of VRS plan documents.

General Assembly Created "Plan 1" and "Plan 2" in 2010

"Plan 1" includes employees who were hired before July 1, 2010, and "Plan 2" includes employees who were hired on or after July 1, 2010. In general, the creation of Plan 2 resulted in requiring newly hired employees to work longer to become eligible for unreduced retirement benefits, and also resulted in the amount of these employees' retirement benefits being potentially less than those for Plan 1.

Public Safety Occupations

Public safety is a general term used to refer to the protection of public health and welfare. Public safety officers include certified law enforcement officers who protect the public through prevention and detection of crime, criminal justice officers who protect the public by managing convicted criminals and juvenile offenders, and emergency first responders, who protect the public by responding to fires, vehicle accidents, and medical emergencies.

- AFC is an average of an employee's highest consecutive 36 months of salary (Plan 1 employees) or the highest consecutive 60 months of salary (Plan 2 employees).
- The benefit multiplier, which is 1.7 percent for most employees, represents the percentage of an employee's AFC that he or she receives in retirement for every year of active service.
- The multiplier is applied to an employee's AFC and years of service to calculate his or her yearly benefit amount:

  Years of Service X 1.7 Percent (Multiplier) X AFC = Annual VRS Retirement Benefit

Other terms included in the table are defined as follows:

- Vesting period is the length of time an employee needs to work to be eligible for a future benefit under the retirement plan.
- Cost-of-living adjustment (COLA) is an increase in the monthly benefits given to retirees each year to account for increases in inflation as accounted for in the Consumer Price Index.

In addition to the basic retirement benefits that most employees receive, four of the plans administered by VRS offer enhanced benefits to selected groups of employees. Three of these plans—the Virginia Law Officers' Retirement System (VaLORS), State Police Officers' Retirement System (SPORS), and Judges Retirement System (JRS)—are for State employees. Local governments also have the option to provide enhanced benefits to their hazardous duty employees that are similar to those offered to State police officers. Employees in these plans are eligible for full benefits earlier than general employees and they receive greater benefit payments for the same amount of service.

The purpose of providing enhanced retirement benefits to employees covered by the SPORS and VaLORS plans is to allow those employees to retire earlier due to the risks they encounter and duties they perform on behalf of the State. Allowing these employees to retire early reduces the risk of serious injury to the employee, their colleagues, and the public. This allows State agencies to better serve the public and achieve their missions and goals while simultaneously reducing their liability for workers' compensation injury claims or other financial reparations.

Consistent with the practice in other states, Virginia provides an enhanced retirement benefit to judges through the JRS plan. For judges appointed prior to January 1, 1995, their actual years of service are weighted by a factor of 3.5 to determine their benefit eligibility and the amount of their benefit. For judges appointed after January 1, 1995 but prior to July 1, 2010, their service is weighted by a factor of 2.5. Judges appointed on or after July 1, 2010 (Plan 2) have different service weights applied according to their age when appointed, and the service weights range from 1.5 to 2.5. Based on JLARC staff interviews with personnel at the Virginia Supreme Court, Department of Legislative Services, and VRS, the purpose of this enhanced benefit is to improve the total compensation package available to judges, whose salaries are reportedly lower than those of private-sector attorneys. Greater benefits are provided in order to provide possible appointees an incentive to relinquish their more lucrative private-sector salaries in exchange for a judicial appointment.

Defined Contribution Plan and Other Benefits Comprise Remainder of State's Retirement Benefits

In addition to providing a defined benefit plan to State and local employees, the State offers employees the choice to participate in a deferred compensation retirement plan defined under section 457 of the Internal Revenue Code. This is a defined contribution retirement savings plan to which the State and employees contribute. Since January 1, 2008, all new employees have been automatically enrolled in the 457 deferred compensation plan unless they opted not to participate. VRS has oversight responsibility for the 457 plan, but employees are responsible for making their own investment decisions. The State matches employees' 457 plan contributions by up to $20 per pay period. The matching contributions are deposited into an employee's 401(a) account. As of July 31, 2011, 27 percent of all eligible employees participated in this plan. Among salaried non-higher education State employees, the participation rate was 67 percent. (Unlike other categories of employees included in the broader figure, this latter category of employees would not have another employer-sponsored tax-deferred retirement savings vehicle available to them.) Political subdivisions can also elect to provide the 457 plan as a supplemental plan for their employees.

VRS also provides defined contribution plans—known as Optional Retirement Plans (ORP)—for school superintendents, political appointees, and faculty members of Virginia's institutions of higher education. These employees have the option to participate in either the defined benefit plan available to State employees or to participate in their respective ORP. This report focuses on the provisions of the defined benefit plans and does not evaluate the effectiveness or discuss potential changes to the provisions of those ORPs.

The State also offers several other retirement-related benefits to employees. Retired employees are allowed to remain in the State's health insurance program until they are eligible for Medicare, but must pay the full premium amount. In addition, employees retiring with at least 15 years of service are entitled to a retiree health insurance credit equal to $4 per month for each year of service. This credit is used to reimburse retirees for the cost of health insurance premiums. Teachers and some political subdivision employees are also eligible for the health insurance credit. VRS also administers disability, group life, and long-term care insurance benefits for members. Based on the study mandate, the focus of this review is on the defined benefit retirement plans.

2008 JLARC Review of Employee Compensation Included Assessment of Retirement Benefits

This study is a follow-up to JLARC's 2008 study of employee compensation, which included a detailed review of retirement benefits for the Commonwealth's classified State employees. JLARC used two consultants for the 2008 study: Mercer and Pricewaterhouse-Coopers (PwC). The objectives of that study, with respect to the retirement programs, were to

- identify alternative benefits that could be provided to employees;
- assess the advantages, disadvantages, and costs of defined benefit, defined contribution, and hybrid retirement plans; and
- assess the appropriateness of the provisions and requirements of each of the retirement plans administered by VRS.

Defined Contribution and Hybrid (Combination) Retirement Plans

In a defined contribution plan, the benefit amount is determined by how much the employee and employer contribute to the employee's account and the investment returns these funds earn. A hybrid / combination plan includes elements of both defined benefit and defined contribution plans. These types of plans are discussed in more detail in Chapter 6.

For the 2008 study, JLARC staff identified three main purposes of the State's retirement programs: (1) recruit prospective employees, (2) retain employees in the State workforce, and (3) allow employees to retire at an appropriate time and with adequate income. JLARC staff found that the State's defined benefit retirement plans are effective at retaining employees in the State workforce and at providing for an affordable retirement at an appropriate time. However, the plan was found to have less impact on recruiting compared to other aspects of compensation.

Mercer and JLARC Staff Found Retirement Benefits Are Important to State's Competitiveness. JLARC staff and Mercer concluded that the defined benefit retirement plan is an important component of compensation that contributes to the State's competitiveness as an employer. In fact, Mercer concluded that the State's retirement benefits exceeded the median value of the retirement benefits provided by 16 large peer employers in Virginia. In a comparison with private sector and other public sector employers in Virginia, both Mercer and PwC ranked the defined benefit plan highly.

Several aspects of the State's retirement plans contributed to their competiveness. The clearest contributor was the fact that, at the time, employees did not have to pay for any portion of the cost of their benefits. While the *Code of Virginia* required an employee contribution of five percent of salary, the State paid this on employees' behalf. In 2008, Virginia was one of only four states that did not require public employees to contribute to the cost of their retirement benefits. Another factor contributing to the competitiveness of the VRS plans was the COLA provided to retirees, which was greater than COLAs granted by retirement systems in neighboring states. One aspect of the retirement plans that was not competitive was the optional deferred compensation plan described previously, which allowed for a very low maximum employer match of employee contributions into the plan.

JLARC and PwC Staff Developed Several Options for Reducing Plan Costs. One objective of the retirement portion of the 2008 study was to develop options for the General Assembly to consider that would reduce the cost of the retirement programs. JLARC staff and PwC assessed the financial impact of each of the elements of compensation. The most competitive aspects of the plans were found to be the most costly ones. However, given the competitiveness of the plans, PwC concluded that they were cost effective. However, PwC also concluded that the State's underfunding of the full cost of the benefits put the State at a moderate level of financial risk because the increasing liabilities were likely to result in persistently higher future costs than what the State had already exhibited a willingness to pay.

JLARC staff and PwC developed several options for reducing the retirement plans' future financial risk. These options ranged from requiring employee contributions, to increasing the age at which employees would be eligible to retire, to implementing an entirely different plan design.

Without a statewide total compensation strategy, according to Mercer in 2008, "the State has no foundation from which to make decisions about the level of salaries and benefits it provides."

The 2008 study emphasized that changes to any element of compensation, including retirement benefits, should not be made without considering their impact on the entire compensation package offered to employees. The report included a recommendation that the Governor and General Assembly direct the development of a statewide total compensation strategy. Absent such a strategy, according to Mercer, "the State has no foundation from which to make decisions about the level of salaries and benefits it provides." To date, such a strategy has not been developed.

COST CONCERNS HAVE PROMPTED VIRGINIA AND OTHER STATES TO MODIFY RETIREMENT BENEFITS AND COST-SHARING STRUCTURES

The costs of retirement programs for public employees have received increased attention nationwide. The economic recession that lasted from 2008 to 2010 reduced the amount of assets on hand to cover the costs of the VRS plans. Between 2009 and 2010, the gap between the plans' existing liabilities and the assets available to pay them widened 49 percent, from $11.8 billion to $17.6 billion. Between 2010 and 2011, this increased by another $2.3 billion to a total of $19.9 billion. This was caused by numerous factors, which included investment losses amounting to -21 percent in fiscal year 2009 as well as a shortfall in payments into the trust fund for the State-supported plans of approximately $1.7 billion between 2009 and 2011. This, in turn, led to an increase in the contributions required from the State and local governments to close the gap.

Increasing contribution requirements have enhanced legislative interest in taking steps to reduce the plans' costs because a less costly benefit structure would likely result in lower contributions being required from the State and local governments in the future. Other states have made, or are considering, changes to reduce their plan costs as well.

Many States Have Made Changes to Retirement Benefits

In response to cost concerns, many state and local governments have taken steps to improve the sustainability of their retirement programs. These initiatives include requiring employees to contribute a greater share of their salary to the cost of the retirement plans, lengthening the period that employees must work before retirement eligibility, and modifying the factors used to calculate employees' future retirement benefits. In general, to the extent that investment returns do not cover costs, these changes are expected to reduce public employers', and ultimately taxpayers' costs.

Many states have enacted modifications to their defined benefit plans in recent years. In 2010 and 2011, 25 states increased the amount that future, current, or both types of employees are required to contribute to their defined benefit retirement plans. In this same timeframe, 23 states increased the number of years that employees must work before they become eligible for full retirement benefits, and, as of August 2011, 17 states reduced post-retirement benefit increases (cost-of-living adjustments) for members of their retirement plans.

While most state and local governments provide traditional defined benefit retirement plans for their employees, several states have implemented alternatives to traditional defined benefit plans.

As of December 2011, 13 states offer more than one type of plan as their core plan for general state employees. Six of these no longer offer a traditional defined benefit to their general employees and seven offer their employees a choice between different types of core retirement plans.

Changes Enacted in 2010 and 2011 Were Designed to Reduce Future Costs

In 2010 and 2011, the Virginia General Assembly enacted changes to the provisions of the VRS plans that were designed to reduce the contributions that the State and local governments would be asked to make to cover plan costs. These changes were modeled after the options described in the 2008 JLARC compensation study and are similar to changes made in other states.

In 2010, the General Assembly enacted legislation that created a new tier of membership in the defined benefit plans, effective July 1, 2010. These "Plan 2" members are employees who were hired on or after July 1, 2010. Employees hired prior to that date are now considered "Plan 1" members. In general, Plan 2 required newly hired employees to work longer to become eligible for full retirement and to contribute five percent of their salary to pay for benefit costs. Noteworthy changes applied to Plan 2 employees included the use of a 60-month window to calculate an employee's average final compensation (instead of a 36-month timeframe) and a cost-of-living adjustment accrual formula that can provide less protection against inflation. Other changes included an increase in the normal retirement age from 65 to the normal Social Security retirement age and an increase in the unreduced retirement provisions from age 50 with 30 years of service to any combination of age and service that equals 90. The requirements to be eligible for reduced retirement benefits were also increased from age 50 with 10 years of service to age 60 with at least five years of service (Table 1, page 4).

In 2011, the General Assembly enacted legislation to require Plan 1 members to also pay five percent of their salary to the cost of the plans. This five percent member contribution is established in §51.1-144 of the *Code of Virginia*. Since 1983, the State had paid the five percent member portion on behalf of employees. As of July 1, 2011, all State employees now pay this five percent member portion, and the State is responsible for the employer portion of the plans' costs. Most school divisions and political subdivisions still pay the member contribution for their employees, and these employers were not permitted to change this policy for their Plan 1 members.

Recently Considered Legislation Would Have Provided Employees With an Alternative Type of Retirement Plan

In 2011, the General Assembly considered legislation to implement a defined contribution plan as the core retirement plan for State employees. As discussed earlier, most State employees already have the option to participate in a defined contribution plan (the 457 deferred compensation plan), but this plan is considered a supplement to the existing defined benefit program. If enacted, this legislation would have given existing and newly hired employees the option to choose whether to participate in the new defined contribution plan or the existing defined benefit plan.

The purpose of offering this alternative retirement plan was to provide employees greater choice and flexibility in their retirement plan options and to reduce the amount of the State's future financial obligations associated with the guaranteed lifetime retirement benefit of the defined benefit program. A defined contribution plan does not directly create financial risk for the employer because it does not obligate the employer to provide a guaranteed benefit.

Other legislation considered in 2011 would have closed the defined benefit plan to new entrants, replacing it with a defined contribution plan. None of the legislation that would have implemented an alternative type of retirement plan was enacted by the General Assembly in 2011.

2011 Study Was Requested to Inform Further Consideration of Retirement Benefits Changes

The changes enacted in 2010 and 2011 were insufficient to achieve legislative consensus regarding the VRS plans' affordability. However, additional benefit modifications are likely to be sought. In his request for this review, the JLARC chairman stated that "additional study should be undertaken before further significant changes…are adopted."

To inform the General Assembly's further consideration of retirement benefit changes, this report presents JLARC staff's findings regarding the effectiveness of the current benefits and their cost. The report also presents several options that the General Assembly could pursue to modify the current benefits structure, and discusses several important factors that should be considered if future modifications are enacted. Chief among these factors is the degree to which benefit modifications could impact the effectiveness and competitiveness of the State's total compensation package.

Chapter

2 Retirement Programs Are Valuable to Management of the State and Local Workforce

In Summary

Retirement benefits are an important part of the total compensation package for State and local governments as employers, and for their employees. State and local employees and State agency human resource managers contend that the role of retirement benefits in recruiting and retaining employees is important, particularly for certain groups of employees, and their importance has increased since JLARC's 2008 compensation study. According to Mercer, in 2011, the State's total compensation package is barely competitive, especially for recruitment, and its competitiveness is maintained primarily due to its total benefits package. Mercer found that while the State's total cash compensation is uncompetitive compared to the market median, its total benefits package was above the market median partly due to the competitiveness of its defined benefit retirement plans. Given its current position relative to the market, the overall competiveness of the State's total compensation package could be further reduced by a continued salary freeze or decreases in employee benefits.

Retirement benefits are an important part of the total compensation package for State and local governments as employers and for their employees. From the employer perspective, State and local governments offer retirement benefits in order to be competitive with other employers. This is an important factor in their ability to maintain a stable and qualified workforce. From the employee perspective, the benefits are key to allowing them to exit the workforce and maintain an acceptable standard of living.

JLARC staff were asked to identify what goals Virginia's State and local governments should try to achieve through offering a retirement plan. In 2008, as part of the State employee compensation study, JLARC staff identified three implied purposes of the retirement plans:

- help agencies recruit new staff by offering a competitive benefit,
- help agencies retain existing staff by linking the amount of the retirement benefit to their years of service, and
- allow employees to retire at an appropriate time and with adequate income.

In the 2008 study, JLARC staff concluded that the Virginia Retirement System (VRS) retirement benefits were adequately achieving those purposes. Based on research conducted for this review, the current defined benefit retirement plan still appears to be adequately achieving these purposes. In fact, since 2008, it appears to have become a greater advantage from the employer's perspective. From the employee's perspective, its significance as a source of retirement income has not substantially changed since 2008, and remains high. This chapter focuses on the effectiveness of the retirement plans from the employer's perspective and the competitiveness of the benefits compared to other large employers. Chapter 3 focuses on the importance of the benefits to employees and their reliance on the plans for future retirement income.

RETIREMENT PROGRAMS HELP RECRUIT AND RETAIN A QUALIFIED WORKFORCE

Even though research shows that salary is likely to be agencies' primary recruitment tool, employee benefits can be important factors in employees' decision making. A 2002 study by the Employee Benefit Research Institute (EBRI) found that one-quarter of workers had accepted, quit, or changed jobs because of the employment benefits they were offered, and 77 percent reported that benefits are "very important" in their decision to either accept or reject a job offer.

JLARC Staff Conducted Agency and Employee Surveys in 2008 and 2011

JLARC staff assessed retirement benefits in 2008 as part of its total compensation study. For both the 2008 study and this current study, JLARC staff conducted online surveys of State employees and agency human resource managers. Several of the same questions were included on both surveys so that JLARC staff could determine whether changes have occurred since 2008.

Respondents to JLARC staff surveys of State agency human resource managers and State employees agree that the current retirement benefits provided by the State play an important role in recruiting and retaining qualified employees, and they may be even more important now than they were in 2008. In addition, the majority of State employees report that they are satisfied with the State's retirement benefits, particularly employees who are closer to retirement eligibility. Local employees and teachers interviewed for this study also emphasized the importance of retirement benefits in recruitment and retention.

Retirement Program Provides Incentive for Joining Public Service

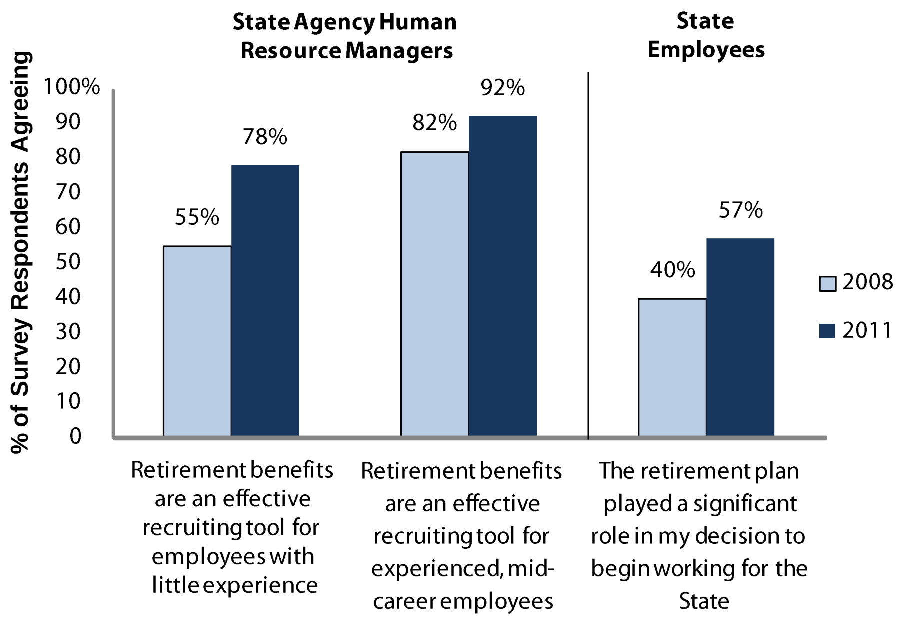
According to a Towers Watson nationwide survey of employees in December 2010, defined benefit retirement plans are an important tool for recruitment. Sixty percent of recent hires responding to that survey reported that their company's defined benefit plan was an important reason why they chose to work for their current employer. The importance of the defined benefit plan for recruiting qualified public employees in Virginia was also highlighted through JLARC staff's own research. Both employees and agency human resource managers indicate that the current retirement benefits provided by the State and local governments are an incentive for employees to enter the Commonwealth's public sector workforce. Based on survey results, the retirement benefits appear to have become more important in recruiting employees since JLARC's 2008 compensation study.

2008 Study Found Retirement Benefits Had Minimal Impact on Recruiting Compared to Other Aspects of Total Compensation. JLARC's 2008 compensation study found that while 55 percent of agency human resource managers reported retirement benefits were an effective recruiting tool for inexperienced employees, and 82 percent said they were effective for recruiting experienced employees, they were not the State's most effective recruitment tool when compared to other aspects of compensation. Salary, and to some degree health care benefits, were of much more importance than retirement benefits in the recruiting process. However, in recruiting for public safety positions, the retirement program was found to be more important because these employees appear to place more value on retirement benefits than other types of employees.

Role of Retirement Benefits in Recruiting Has Increased Since 2008. Current State agency human resource managers feel that retirement benefits remain an important recruiting tool for their agencies. As shown in Figure 1, 78 percent of managers responding to JLARC staff's 2011 survey of agency human resource managers said that the State's retirement benefits are an effective recruiting tool for prospective employees with little or no work experience (compared to 55 percent in 2008), and 92 percent said they were an effective recruiting tool for experienced, mid-career employees (compared to 82 percent in 2008).

Interviews with human resource managers confirmed the survey results. During a group interview with JLARC staff, one manager stated that the State's retirement benefits help the State compete with other employers for new employees, because non-government employers are less likely to offer defined benefit plans. One manager stated, "Retirement benefits are the feather in the State's cap." Other managers stated that prospective employees know they are unlikely to receive substantial salary increases given the State's financial situation, so the retirement benefits become a more important recruitment tool than they may have been in the past. Another said that, because State agencies have downsized, agencies are trying to recruit employees with more experience, and retirement benefits play a large role in agencies' ability to attract these experienced workers. One manager stated, however, that the retirement plan was a more effective recruitment tool when the State paid the member contribution on behalf of employees. In addition, human resource managers indicated that while retirement benefits are an important recruitment tool, they are a more important retention tool.

Figure 1: Retirement Benefits Are of Greater Importance to Recruitment in 2011 Than in 2008



Source: JLARC staff surveys of State agency human resource managers, 2008 and 2011.

The majority of State employees responding to the survey indicated that the State's retirement benefits played a role in their decision to work for the State, although it was not identified as the State's top recruitment tool. On JLARC's 2011 survey of State employees, respondents cited retirement benefits as one of the top three reasons they came to work for the State, but said the stability and security of State service and the State's health care benefits played a larger role in their decision to work for the State. Still, 57 percent of employees agreed that the retirement plan played a significant role in their decision to begin working for the State, up from 40 percent in 2008 (Figure 1). SPORS and VaLORS members were more likely to agree that retirement benefits played a role in their decision to work for the State—65 percent and 67 percent of SPORS and VaLORS members, respectively, compared to 55 percent of other VRS members. In addition, retirement was ranked third by State employees as a reason to work for the State on the 2011 survey, up from its fourth-place ranking in 2008. One State employee commented, "What enticed me (and I'm assuming many other employees) to work for the state was in large part the security of the defined benefit retirement system." Another stated, "A lot of employees, such as myself, took this job at a lower salary because of the benefits and retirement." This sentiment was expressed by many other employees responding to the JLARC staff survey or participating in interviews.

Local employees also view retirement benefits as a recruitment incentive. The defined benefit retirement program was identified as one of the more attractive aspects of compensation by several employees in each group interview. For example, one group of teachers interviewed for this study said that retirement benefits were "very influential" in their decision to begin working for their school division. Other local employees interviewed by JLARC staff cited the fact that the benefits provided by their local government outweighed the relatively low salaries as an important influence on their decisions to work there. For example, one local government employee stated, "The retirement benefit was so important that I took less of a salary."

Defined Benefit Plan Encourages Long-Term Public Service

Defined benefit plans are specifically designed to retain qualified employees. These plans encourage employees to continue working with their employer because length of service not only determines benefit eligibility, but is also a factor in the calculation of the benefit amount. In addition, the salary base on which the benefit is calculated is typically an average of the last three to five years of earnings, so the longer the employee works, the higher the salary base will be (assuming the employee receives salary increases over time). Employees must also work for a specified period of time before becoming vested in the plan, which provides an incentive for them to stay with their employer for at least that period of time.

2008 Study Found Retirement Benefits Effective at Retaining Certain Types of Employees. According to PwC's 2008 assessment, the role that the retirement program plays in retaining employees who are considering leaving largely depends on their length of tenure. They found that retirement benefits were a powerful retention tool for mid-career employees, but were not as effective at retaining employees during the early years of their career. However, for public safety positions, the retirement benefits played a significant role in retaining employees, regardless of years of service.

The 2008 JLARC study found that 40 percent of employees who left State service had less than five years of service.

Research conducted by JLARC staff for the 2008 study also showed that retirement benefits were effective at retaining employees with ten or more years of service, but were less effective at retaining employees in the early years of their career. Data analyzed by JLARC staff showed that about 17 percent of employees who left State service had less than one year of service, while another 23 percent had between one and 4.9 years of service credit. Nearly half of employees who left a State agency in 2007 did so before the five-year threshold for vesting in their VRS retirement plan. If these employees left a VRS-covered position altogether—rather than simply transferring to another State or local employer—this means they left before being eligible to receive a guaranteed pension payment from the State later in their careers.

Retirement Benefits' Effectiveness at Retaining Employees Has Increased Since 2008. Research conducted for this study found that retirement benefits are an important tool for retaining employees, and their value as a retention tool has increased since 2008. State agency human resource managers overwhelmingly agree that retirement benefits encourage employees to continue working for the State. As shown in Figure 2, 95 percent of human resource managers responding to the 2011 survey said that the retirement benefits are an incentive for longer-tenured, skilled, and experienced employees to stay with their agency, up slightly from 92 percent in 2008. In addition, according to the survey results, retirement benefits are providing more of an incentive for recently hired employees to stay with their agency than they did in 2008. Seventy-three percent of managers said that the retirement benefits are an incentive for recently hired employees to stay with their agency, compared to 41 percent in 2008. Human resource managers interviewed by JLARC staff also emphasized the importance of the retirement benefits in retaining employees during a group interview with JLARC staff.

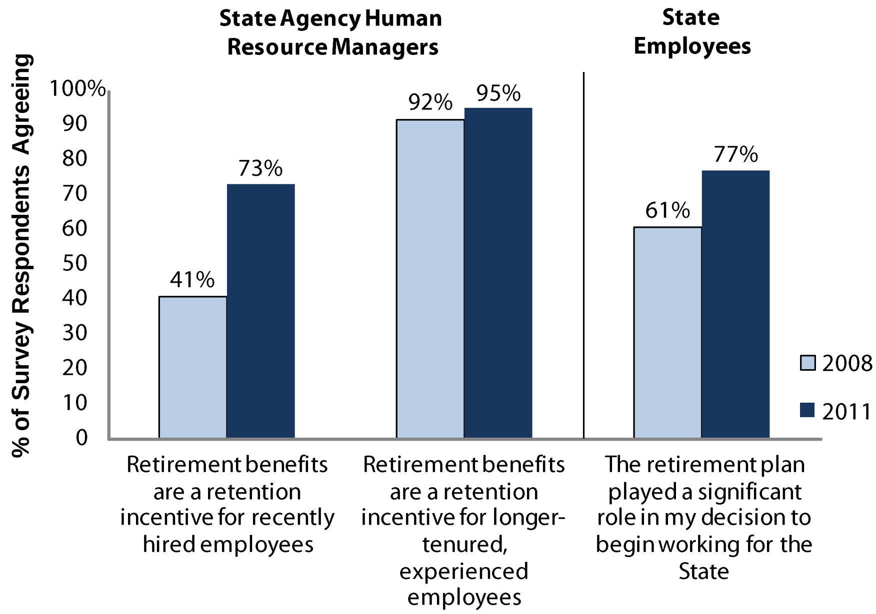
Results from the employee survey also indicate that the retirement benefits play a significant role in retaining employees, and their role as a retention tool has increased since 2008 (Figure 2). In 2011, 77 percent of employees agreed that the retirement plan plays a significant role in their decision to continue working for the State, up from 61 percent in 2008. SPORS and VaLORS members, and employees who are older and who have more years of service, are more likely to say that retirement benefits keep them working for the State. In addition, in 2011, retirement ranked third among employees as a reason to continue working for the State, up from a fifth-place ranking in 2008. One State employee commented:

> A guaranteed pension from the state was the only reason I stayed with a state job my entire career (25 years so far) even though I could have made at least 20% more a year in the private sector.

Another said:

> Many state employees I know that have around 10 years of service are extremely frustrated and would leave if they did not have good health care and retirement benefits.

Figure 2: Retirement Benefits Are of Greater Importance to Retention in 2011 Than in 2008



Source: JLARC staff surveys of State agency human resource managers, 2008 and 2011.

State and local employees participating in group interviews also said retirement benefits played an important role in retaining employees, particularly employees with more years of service.

The defined benefit plan is also essential in retaining qualified school teachers, according to interviews with staff from the Virginia Education Association (VEA) and groups of teachers interviewed by JLARC staff. VEA staff stated that the defined benefit plan is a crucial aspect of compensation for Virginia's teachers because it is perceived as compensating teachers for their relatively low salaries, compared to other public sector jobs in Virginia and to teachers' pay in other states. According to VEA, the current plan is a "lynchpin" for the profession, and making changes to the benefits, including the creation of an optional alternative plan, could have a negative effect on teacher retention and quality. Most of the teachers interviewed for this study also said that retirement benefits are influential in their decision to keep working as a public school teacher.

However, as with recruitment, retirement benefits are not the top retention tool of the State and local governments. For example, State employees responding to the employee survey say that retirement benefits play a role in their decision to continue working for the State, but the work environment/nature of work and the health care benefits are more important.

RETIREMENT PROGRAMS CONTINUE TO BE KEY TO STATE'S COMPETITIVENESS AS AN EMPLOYER

Section 2.2-1202 of the *Code of Virginia* makes explicit that the goal of the State is to provide a total compensation package that is comparable to the private sector and to the State's peers. It states,

> It is a goal of the Commonwealth that its employees be compensated at a rate comparable to the rate of compensation for employees in the private sector of the Commonwealth in similar occupations. In determining comparability, consideration shall be given to the economic value of fringe benefits in addition to direct compensation.

In 2008, JLARC staff asked Mercer to conduct a detailed analysis of State employee total compensation (including benefits). Mercer evaluated the competitiveness of this package relative to employers with whom the State would compete for employees. Because the General Assembly has made changes to the compensation package for most State employees and economic changes have altered total compensation in the overall market since 2008, a similar compensation analysis was conducted for this study.

Market Median

Mercer used data from its compensation survey (not JLARC's peer employers) to calculate the market median, which is "the amount of pre-tax dollars required for the employee to purchase or reproduce the benefit outside of employment with the organization."

According to Mercer, a "competitive" total compensation package can be defined as one that falls between 90 and 110 percent of the market median. Total compensation below this range would make it difficult for the State to recruit and retain qualified employees.

In 2008, Mercer Found That State's Total Compensation Was Competitive, Primarily Due to Benefits

Using Department of Human Resource Management data, in 2008, Mercer compared the total compensation of 43 representative job roles across seven occupational "families" to provide perspective on how the State's salaries compare to other employers. To do this, Mercer used various databases and market surveys reflecting cash compensation paid by hundreds of organizations to create a total cash compensation index score. To create a total benefits index score, JLARC staff and Mercer chose 16 large peer employers in Virginia. Mercer then combined the total cash compensation and total benefits index scores to create a composite "total compensation" index score.

Relative to its peers in 2008, the composite total cash and total benefits index scores resulted in a total compensation index score of 96 percent of the market median. Although the State's average total compensation package lagged the market median (100 percent) by four percentage points at that time, the State was considered within the competitive range.

The two key elements of this analysis were the total cash compensation and total benefits. Whereas total cash compensation was found to be less competitive than its peers, at 88 percent of the market median, this 12 percentage point lag in cash compensation was somewhat offset by total benefits being more competitive, at 108 percent of the market median. The 2008 report provides more detail on the individual elements of total compensation.

State's Total Compensation Remains Marginally Competitive in 2011, but Competitiveness Could Be Jeopardized by Benefit Reductions or Continued Salary Freeze

JLARC staff directed Mercer to conduct a similar analysis for 2011, using the same organizations used in 2008 where possible. However, because data on the same organizations was not available to Mercer in 2011, the comparator group included some different employers than it did in 2008. Table 2 lists the 15 peer organizations used in the 2011 competitiveness analysis.

Table 2: Peer Employers Used in 2011 Total Compensation Comparison

Altria Group, Inc.*	Media General, Inc.*
Booz Allen Hamilton	Rockingham Memorial Hospital*
Capital One Financial Corporation*	Science Applications International Corporation*
Carmax Auto Superstores, Inc.	State of Maryland
Dollar General Corporation	The Kroger Company*
Dominion Virginia Power*	U.S. Office of Personnel Management*
Ferguson Enterprises, Inc.	United Parcel Service Freight*
MeadWestvaco, Inc.	

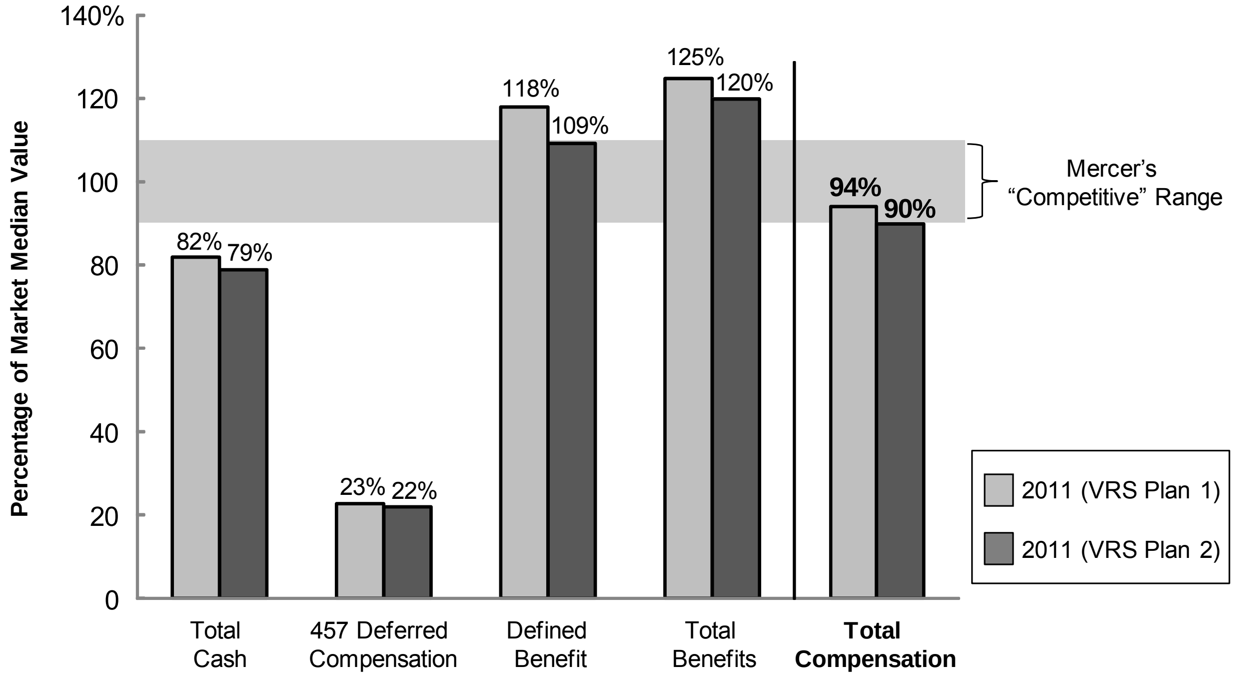
*Employers used in 2008 Mercer analysis.

Source: Mercer's Total Remuneration Comparison Analysis, 2008 and 2011.

Because of the differences between the organizations included in the peer groups in 2008 and in 2011, any change in the State's competiveness from 2008 to 2011 compared to the same peers cannot be assessed. Instead, the competitiveness of the State's total compensation package was compared based on the relative position of the State within the peer group in each of the two years (its "relative position").

In 2011, the State's Total Compensation Lags Market Median by Six to Ten Percentage Points, Depending on VRS Plan Membership. As shown in Figure 3, in its 2011 total compensation analysis, Mercer benchmarked the value of VRS Plan 1 employees' total compensation package at 94 percent of the market median. The value of this

Figure 3: In 2011, Mercer Benchmarked State's Salaries and Benefits at 94 Percent of Market for VRS Plan 1 and 90 Percent of Market for VRS Plan 2



Source: JLARC staff analysis of Mercer's Total Remuneration Comparison Analysis, 2011.

package relative to the market has decreased since 2008, when, as mentioned above, total compensation for these employees was found to be at 96 percent of the market median. (The 2011 analysis includes the five percent required member contribution for all employees and five percent salary increase for Plan 1 employees, effective July 1, 2011.)

VRS Plan 2 provisions are the relevant benefits for purposes of recruitment. In the 2011 analysis, Mercer found that VRS Plan 2 employees' total compensation package is currently valued at 90 percent of the market median, the bottom of Mercer's "competitive" range. The differences between the relative positions of the competitiveness of Plan 1 and Plan 2 in 2011 are a result of the less generous provisions of the defined benefit package for Plan 2 employees and because Plan 2 employees' salaries did not increase five percent to help offset the five percent mandatory member contributions, as they did for Plan 1 members.

According to Mercer, compared to the 15 competitors, the State currently ranks last in its total compensation for both Plan 1 and Plan 2.

According to Mercer, compared to the 15 competitors, the State currently ranks last in its total compensation for both plans. By way of comparison, the State was ranked twelfth out of 16 competitors in Mercer's 2008 analysis of total compensation. The State's position in 2011 reflects favorable comparisons in medical, dental, and defined benefit retirement provisions which are offset by unfavorable comparisons in the areas of total cash compensation, flexible spending accounts, post-retirement medical provisions, and its supplemental defined contribution retirement plan (the 457 deferred compensation plan).

Considering Mercer's definition of a "competitive" employer (one that ranks between 90 and 110 percent of the market median), these findings suggest the State is marginally competitive in 2011, albeit at the bottom of Mercer's range. However, future reductions to benefits or salaries without offsetting increases in other areas of compensation will jeopardize the State's competitiveness.

The job roles in the State are diverse and include relatively low skilled as well as highly skilled positions. The State workforce implements programs that have highly diverse missions including managing and maintaining the State's transportation infrastructure, guarding public safety, providing human services to those in need, and registering citizens' motor vehicles, among others. Data were not available for this study to determine the relative competitiveness of the total compensation packages provided for individual job roles. However, to the extent that the State's marginal competitiveness harms its ability to attract and retain employees in positions that represent the range of skill levels, public services could be diminished.

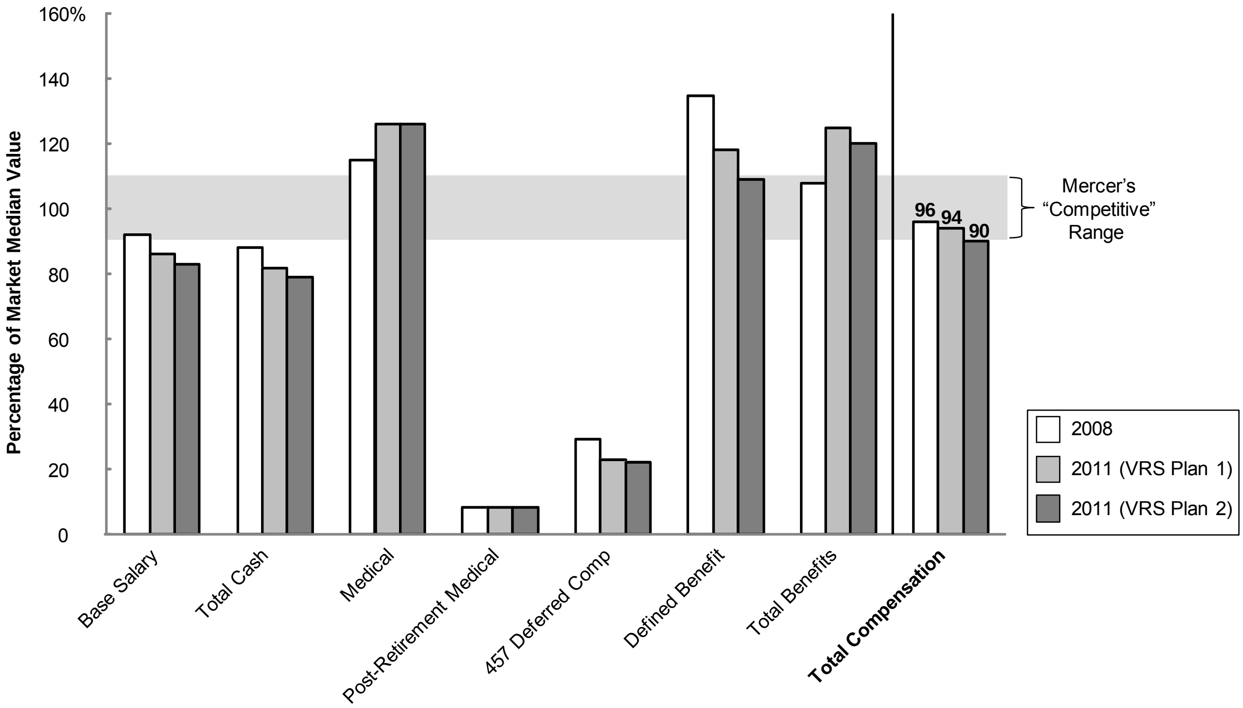
Cash Compensation Is Not Competitive When Compared With the Market and Contributes to State's Last Place Ranking Compared to Competitors. The State's most key element of total compensation is its cash compensation, consisting primarily of salaries. In 2008, Mercer found that State employees placed four times more value on salaries than they did on the next most important aspect of compensation, health insurance. Salary is the key element of total compensation not only because it has the most direct impact on the satisfaction and motivation of the workforce, but also because the value of many of the employee benefits, including the retirement programs, are affected by salary levels.

In both 2008 and 2011, Mercer's analysis shows that cash compensation, alone, is not competitive when compared with the market.

In both 2008 and 2011, Mercer's analysis shows that cash compensation, alone, is not competitive when compared with the market. In both time periods, low salaries were the primary driver of the State's relatively low competitiveness.

As shown in Figure 4, the relative competitiveness of the State's total cash compensation (salaries and bonuses) has decreased by six percentage points since 2008, from 88 to 82 percent of the market median for Plan 1 employees. For Plan 2 employees, cash compensation is benchmarked at 79 percent of the market median in 2011.

Figure 4: Relative to Its Peer Employers in Each Year, the State's Competitiveness Is Lower in 2011 Than in 2008



Note: VRS Plan 2 was introduced in 2010. Before then, those benefits currently offered in Plan 1 were the only benefits offered to general State employees. Although they are not shown above, under total benefits, Mercer also included benefits such as dental benefits, leave benefits, and medical flexible spending accounts.

Source: JLARC staff analysis of Mercer's Total Remuneration Comparison Analysis, 2011.

Uncompetitive salaries not only diminish the competitiveness of the State's overall total compensation package, but they also decrease the value of other aspects of total compensation, such as retirement and leave benefits. For example, the value of the defined benefit package relates to salaries because an employee's salary (average final compensation) is used in the equation to determine the value of his or her defined benefit plan. Therefore, the value of VRS benefits will be lower when salaries are lower, and conversely higher when salaries increase. This suggests the State can have a significant positive impact on its total compensation package with salary increases, and a significantly negative impact if it continues its salary freeze or if it reduces salaries.

One of the primary reasons for this decline in salary competitiveness is that State employees have received one salary increase since 2007, an increase of five percent for Plan 1 employees on July 1, 2011, which was paired with a five percent required contribution toward the costs of their retirement benefits. The net effect for most employees was a slight decrease in take-home pay.

Had the State not provided the five percent salary increase to help offset the five percent required employee contribution in 2011, the relative competitiveness of the State's VRS Plan 1 total cash compensation would have dropped to 79 percent of the market median, 11 percentage points below the bottom of Mercer's "competitive" range. The value of the total compensation package for Plan 1 employees would have also dropped to 91 percent of the market median, one percentage point above the bottom of Mercer's "competitive" range. The sensitivity of the total compensation package to changes to cash compensation suggests that additional benefit reductions without offsetting salary or benefit increases may jeopardize the State's competitiveness as an employer. Given the current level of competitiveness, any further reductions in cash compensation or retirement benefits will take the State's total compensation package out of the competitive range, especially for recruitment.

The sensitivity of the total compensation package to changes to cash compensation suggests that additional benefit reductions without offsetting salary or benefit increases may jeopardize the State's competitiveness as an employer.

Throughout the course of this study, employees consistently expressed to JLARC staff their concerns with the existing salary freeze. For many employees interviewed and surveyed, the benefits package encourages them to maintain their commitment to public sector employment because it is perceived as compensation for the gap between public and private sector salaries. However, many employees expressed that their job satisfaction is eroding with the possibility of further benefit reductions.

The State's Non-Cash Benefits Have Kept It Marginally Competitive as an Employer. Mercer's findings indicate that the State's benefits package does indeed provide some balance to the relatively low salaries paid to State employees, on average. The relative competitiveness of the State's total benefits package (for example, its retirement and medical insurance benefits) has increased since 2008. As shown previously, whereas the State's total benefits package was benchmarked at 108 percent of the market median in 2008, the total benefits packaged offered to Plan 1 and Plan 2 employees were found to be at 125 and 120 percent of the market median in 2011, respectively.

The State's Retirement Plan Remains Competitive. The competitiveness of both defined benefit packages (Plan 1 and Plan 2) were found to be above the market median in 2011. Specifically, Plan 1 and Plan 2 provisions placed these defined benefit packages at 118 percent and 109 percent of the market median, respectively. For Plan 1 employees, the State's relative position declined since 2008, which could be a result of the new five percent VRS contribution requirement for all State employees. Plan 2, which was introduced in 2010, includes certain provisions that ultimately decrease the value of the benefit for those retiring under it compared to those retiring under Plan 1 (see Table 1, Chapter 1).

While Mercer's analysis indicates that the VRS plans provide greater benefits than many of the Commonwealth's peers, it is important to evaluate the generosity of those benefits within three relevant contexts. First, the VRS retirement plans are one element of a total compensation package (Plan 2) that, at least for recruitment purposes, was determined by Mercer to be just barely competitive. Second, the VRS plans alone do not provide sufficient income to permit an affordable retirement. Third, because of the relatively low health care benefit provided by the State to retirees, a substantial portion of the income derived from the VRS benefits must be used to pay for health care costs. These last two issues are discussed in the next chapter.

Chapter

3

Current VRS Benefits Can Provide Adequate Income When Combined With Other Resources

In Summary

According to Mercer, most VRS members will need to replace between 79 and 99 percent of their pre-retirement income at retirement to maintain a similar standard of living during retirement. On its own, the current defined benefit plan will not replace this entire amount, and for most employees it will replace no more than half of the recommended amount. However, when combined with unreduced Social Security benefits, VRS members could reach these income replacement targets. If these two retirement income sources will not allow employees to retire without significantly disrupting their standard of living, they will need to find other sources of income, delay retirement, or reduce their standard of living. Similarly, if employees retire prior to when they are eligible for Social Security, they will need to find a means to replace the difference between their VRS benefit and their recommended income replacement target. Finally, the increasing costs of health care may also increase income replacement needs in the near future.

JLARC staff were directed to evaluate how much of an employee's pre-retirement salary will need to be replaced at retirement and how this income should be generated. Specifically, JLARC staff were requested to answer:

> What is an appropriate percentage of an employee's salary that should be replaced once an employee retires, and what portions of that income replacement should come from the employer retirement plan, Social Security, and other savings?

According to retirement planning experts, the combination of an employer-sponsored retirement plan, Social Security, and, if necessary, personal savings should allow employees to retire with enough income to not significantly disrupt their pre-retirement standard of living. This chapter provides guidance as to what percentage of an employee's salary should be replaced at retirement to allow for such a transition.

Based on Mercer's analysis, the defined benefit plans administered by the Virginia Retirement System (VRS) can allow retirees to achieve sufficient retirement income, but only when combined with other sources such as Social Security or personal savings. However, being able to accumulate sufficient savings outside of the defined benefit program or to work until eligible for full Social Security benefits may not be reasonable expectations for some employees. Still, most employees report that they plan to supplement their VRS benefits with other resources.

EMPLOYEES VIEW STATE'S DEFINED BENEFIT RETIREMENT PLANS AS IMPORTANT SOURCE OF FUTURE RETIREMENT INCOME

VRS benefits appear to be a significant component of most State employees' expected retirement income. In fact, according to JLARC staff's State employee survey, most employees (72 percent) reported that their VRS benefit would constitute at least half of their future retirement income.

It is likely that one of the primary reasons why State employees, particularly those with more years of service, plan to rely heavily on their VRS benefit at retirement is that contributing to other forms of savings may be difficult, given low relative salaries and the new five percent contribution requirement. It is expected, therefore, that employees who cannot or do not save a portion of their salary toward retirement will not be able to accrue significant savings outside of the VRS plan.

Retirees' Income Needs Will Differ, but Most Can Maintain Their Standard of Living With Less Than Their Pre-Retirement Income

The primary measure retirement planning experts use to determine whether retirees will have sufficient income at retirement is the retiree's income replacement rate. The income replacement rate is calculated by dividing a retiree's annual gross retirement income by their annual final compensation at retirement. For example, an individual whose annual final compensation was $60,000 and whose gross annual retirement income is $50,000 would have a replacement rate of 83.3 percent ($50,000 / $60,000).

Typically, retirees do not need to replace 100 percent of their final compensation because their cost of living and savings needs are lower in retirement. Retirees' tax liability is also typically lower at retirement because their taxable income usually decreases. In addition, retirees are no longer required to pay Social Security taxes, and this new take-home income is then available to pay for other expenses. The portion of pre-retirement income that was reserved to save for retirement can now also be used to pay for general living expenses.

Partly due to variation in personal situations and pre-retirement income, there is no consensus among experts on a single income replacement target. In June 2011, the Government Accountability Office (GAO) reported that income replacement needs range from 65 to 85 percent of pre-retirement earnings. In JLARC's 2008 compensation study, JLARC staff reported that an 80 percent replacement rate is widely cited in the financial community as sufficient.

Aon Consulting's *2008 Replacement Ratio Study*™

Recommended by Mercer, the Aon Consulting *2008 Replacement Ratio Study* calculates the income retirees will need to maintain their standard of living. This study takes into account changes in taxes, savings, and expenditures between employment and retirement.

Generally, the 80 percent figure still stands within the ranges offered by most experts. However, income replacement needs will differ across individuals due to differing family situations, pre-retirement income levels, and other relevant characteristics. For example, according to a study conducted by Aon Consulting, a family with one wage earner, making $20,000, and retiring at age 65 with a spouse age 62 will need to replace approximately 94 percent of this pre-retirement income to maintain a similar standard of living at retirement. In contrast, if the same family made $70,000 per year prior to retirement, they would only need to replace 77 percent of their pre-retirement income at retirement.

Mercer Recommends That Retirees' Income Range From 79 Percent of Pre-Retirement Earnings for Those With Higher Final Salaries to 99 Percent for Those With Lower Final Salaries

Mercer developed income replacement targets that would apply to most of Virginia's State employees. To do this, Mercer adjusted Aon's recommended replacement ratios to account for the health insurance credit available at retirement and the five percent contribution toward retirement benefit costs that all State employees are now required to make. After these adjustments, Mercer's recommended replacement ratios for State employees range from 79 percent to 99 percent of pre-retirement income, depending on the worker's pre-retirement income (Table 3).

Table 3: Mercer Recommends State Employees Replace Between 79 and 99 Percent of Pre-Retirement Income at Retirement

Pre-Retirement Income	Baseline Replacement Ratio From the 2008 Aon Consulting Study	Mercer's Recommended Replacement Ratios for State Employees
$20,000	94%	99%
30,000	90	92
40,000	85	88
50,000	81	83
60,000	78	80
70,000	77	79
80,000	77	79

Note: Similar to the Aon study, Mercer used the baseline scenario of an age 65 worker and age 62 non-working spouse for its recommendations. Additional analysis was conducted for salaries above $80,000. However, because most State employees make less than this amount, JLARC staff's analyses focus on those making $80,000 and below.

Source: Mercer analysis of Aon Consulting's *2008 Replacement Ratio Study* and State Employee Compensation Benefits.

In general, this range is applicable to local employees as well, although it would need to be adjusted based on variations in local health insurance benefits and employee contribution requirements.

...lower-income employees will need to replace a higher percentage of their pre-retirement income...

According to the Aon study, lower-income employees will need to replace a higher percentage of their pre-retirement income for two primary reasons. First, lower paid employees are less likely to be saving a significant percentage of their pre-retirement income while employed because a greater percentage of their pre-retirement income is actually used to pay for basic living expenses. Second, age- and work-related expenditures, such as transportation expenses, do not decrease by as much, relative to income, for lower-income employees at retirement as for higher-paid employees.

Mercer Notes Income Replacement Needs Can Be Up to Ten Percentage Points Lower Than the Recommended Rates, Especially for Higher Wage Earners

As mentioned, income replacement needs will vary depending on individual circumstances, such as marital status and pre-retirement income levels. According to Mercer, because their recommended income replacement rates differed from the "rule of thumb" by between five percent and 25 percent, it is believed that some employees, particularly higher wage earners, could achieve adequate retirement income with income replacement rates ten percentage points lower than Mercer's recommended targets in Table 3. Specifically, Mercer notes

> When evaluating defined benefit plans, since no simple formula will provide exactly the desired replacement at every level of earnings, you might try to come close to the full levels for lower paid employees, but accept replacement around ten percent lower as earnings increase.

WHEN COMBINED WITH SOCIAL SECURITY INCOME, VRS BENEFITS CAN PROVIDE ADEQUATE INCOME REPLACEMENT

VRS retirement benefits alone are unlikely to provide employees (even those with long tenures) with enough income to meet their income replacement targets. However, Social Security income can be used to meet the remaining retirement income needs. Generally, the adequacy of these two benefits will be influenced by the employees' pre-retirement income, the years an employee has worked under a VRS-covered position, and the age at which the employee retires.

For Most Employees, VRS Benefits Alone Will Not Meet Recommended Income Replacement Targets

Benefit Multiplier

A retirement plan's benefit multiplier is the percent of a member's average final compensation that he or she receives in retirement for every year of active service.

Because the VRS benefit is determined by a formula based on years of service, a benefit multiplier (1.7 percent), and an employee's average final compensation (AFC), an employee's income replacement rate can be approximated based on a given number of years of service. The benefit formula is as follows:

> *Years of service X 1.7 percent (multiplier) X average final compensation = annual VRS retirement benefit*

For example, an employee who retires with 30 years of service will earn 51 percent of his or her AFC each year (30 years of service X 1.7 percent).

According to VRS data, the average State employee retiring in 2011 retired with 23.3 years of service. VRS staff estimate that the average income replacement rate for these retirees was 39.6 percent from their VRS benefit.

With current VRS benefit levels most retirees will need other resources, such as Social Security and possibly additional personal savings, to fill the gap between target income replacement rates and the income replacement earned through a retiree's VRS benefit. Using the Mercer-recommended target income replacement rates listed in Table 3 as a guide, a State employee with 30 years of service, making $40,000 per year immediately before retirement, would need to replace 37 percent of his or her pre-retirement income in addition to his or her VRS benefit at retirement to maintain a similar standard of living. For an average State retiree with 23.3 years of service, an additional 48 percent of their pre-retirement income would be needed to meet the income replacement target for the $40,000 salary level.

Social Security Benefits Could Bridge Gap Between VRS Benefit and Target Income Replacement Rate, but This Will Require Employees to Work Longer Than They Do Now

According to Mercer, depending on a retiree's years of service in a VRS-covered position, the age at which the employee retires, and the retiree's pre-retirement income, the combined income generated through his or her VRS and Social Security benefits has the potential to provide adequate income replacement. As shown in Table 4, most State employees can achieve more than adequate income replacement with 30 years of VRS-covered service and unreduced Social Security benefits (age 67 for most).

An employee who retires at age 67 with 37 years of VRS-covered service (which assumes an age-at-hire date of 30) would experience higher income replacement rates than those shown in Table 4. For these individuals, income replacement through the VRS benefit would increase from 51 percent to approximately 63 percent of their pre-retirement income. However, this income replacement potential is unlikely to be realized by most individuals if recent retirement trends continue, as the average employee would need to work approximately 14 years longer than the current average years of service of retired State employees.

Table 4: When Paired, VRS and Unreduced Social Security Benefits Meet Income Replacement Targets at Age 67 With 30 Years of Service

Salary Level	Income Replaced Through VRS Benefit	Income Replaced Through Social Security	Mercer's Recommended Replacement Target	VRS and Full Social Security Benefits Meet Target Income Replacement?
$20,000	51%	65%	99%	Yes
40,000	51	50	88	Yes
60,000	51	42	80	Yes
80,000	51	35	79	Yes

Note: According to Mercer, it is reasonable for the State to evaluate the adequacy of the VRS benefit when paired with Social Security benefits provided to an individual who retires at the normal retirement age (currently, 67 for those born in or after 1960). In general, this range is applicable to local employees as well, although it would need to be adjusted based on variations in local health insurance benefits and employee contribution requirements. Mercer notes that recommended replacement targets could be adjusted to as low as ten percent less than those listed.

Source: Mercer and JLARC staff analysis of Social Security benefits and VRS Plan documentation.

VRS data indicate that, on average, FY 2011 retirees from the State employees plan retired at age 62 (61 for teachers), the age at which a worker becomes eligible for reduced Social Security benefits. A VRS calculation of the average Social Security benefit at age 62 ($17,220 for State employees) shows that the average retiree in 2011 may have only replaced 72 percent of his or her pre-retirement income, which is less than Mercer's lowest recommended target.

VRS Benefit and Social Security Benefits Should Not Be Expected to Meet Retiree's Income Replacement Needs in All Situations

The combination of Social Security and VRS benefits may not meet recommended income replacement targets for many employees, especially those who have not worked a full career under VRS-covered positions, those who retire before they are eligible for full Social Security benefits, and those with higher pre-retirement incomes. For example, for an individual with seven years of service in a VRS-covered position, it is reasonable to expect that these employees have accrued other retirement savings from other employment. For this reason, Mercer notes that it is reasonable for the State to assume a full-career employee who is eligible for unreduced Social Security benefits when measuring the adequacy of VRS benefits.

Finally, income replacement through Social Security decreases as pre-retirement income increases, so that lower-salaried employees can expect more of their pre-retirement income to be replaced by their Social Security benefits. Mercer recommends that the State consider limiting its responsibility for providing adequate income replacement to employees with average annual salaries of less than $80,000. This is because income replacement needs begin to increase for pre-retirement income greater than $80,000. Of those employees retiring in 2011, approximately 16 percent had an average annual salary of $80,000 or greater.

Deferred Retirement, Personal Savings, or Other Sources of Income Will Be Needed by Some Retirees

If an employee's Social Security and VRS benefits combined do not meet their income replacement targets, they may need to rely on other sources of income, such as personal savings or a spouse's retirement income, or they may choose to defer retirement. If unable to find other sources of income to bridge the gap between the income replacement targets and the combined VRS and Social Security benefits, retirees would need to reduce their standard of living during retirement. The size of this reduction would be determined by the size of the gap between their income and their income replacement targets.

As stated previously, VRS data show that the average VRS member retiring in FY 2011 retired prior to eligibility for unreduced Social Security and with insufficient accumulated service to replace even half of his or her pre-retirement income. Based on survey results, it is likely that those retirees are still working in some capacity while drawing VRS benefits or are relying on personal savings or other resources:

- Of those employees surveyed who knew what they would most likely do when they reached retirement eligibility, only 13 percent said they plan to retire and stop working altogether. Instead, approximately one-quarter of these employees said they believe they will retire and seek other employment, and the largest percentage (39 percent) predicted that they would delay retirement from the State because the VRS benefit amount is unlikely to provide them with sufficient income at retirement.

- Most employees plan to rely on Social Security and their VRS benefit when they retire, but some employees will also rely on personal savings and their spouse's retirement income. About half of all State employees surveyed who knew the sources of income on which they would retire said they plan to rely partly on their savings from their 457 Deferred Compensation plan. Forty-seven percent of these employees said they plan to rely partially on other forms of personal savings, and 27 percent said they plan to rely partially on their spouse's retirement income.

As of June 2011, the average 457 Deferred Compensation plan account balance among all active 457 plan participants was $21,361 and the median balance was $10,597. This defined contribution plan is a supplement to the defined benefit plan and participation is optional. According to VRS, as of June 2011, 27 percent of all eligible salaried and wage employees participated in the 457 program. Among all eligible salaried non-higher education State employees, who do not have access to another tax-deferred savings vehicle through their employers, this participation rate is 66 percent.

EARLIER RETIREMENT BY SPORS AND VaLORS MEMBERS MEANS THAT VRS BENEFIT IS LESS LIKELY TO BE SUPPLEMENTED BY SOCIAL SECURITY INITIALLY

The benefit multipliers for the State Police Officers' Retirement System (SPORS) and the Virginia Law Officers' Retirement System (VaLORS) plans, which are designed to allow public safety employees to retire earlier than general VRS members, are higher than the benefit multiplier for general State and local employees. For the SPORS program, the benefit multiplier is 1.85 percent. The multiplier for VaLORS members, such as Capitol police officers, state correctional officers, State parole officers, and ABC special agents, is 2.0 percent. Over a 30-year career, these provide between approximately 4.5 (SPORS) and nine (VaLORS) percent higher income replacement than the 1.7 multiplier for general employees.

Many SPORS and VaLORS members, however, do not work a full 30-year career. SPORS and VaLORS members are eligible to retire with full benefits as early as age 50 with at least 25 years of service. Therefore, these employees tend to have slightly shorter tenures, and they often retire before they are eligible for Social Security benefits, which means they need to rely on their VRS benefit and any personal savings prior to Social Security eligibility. (Most individuals are not eligible to receive any form of Social Security payments before the age of 62.) Therefore, members of these plans would have significantly lower income replacement rates than they would if they had unreduced Social Security benefits. For example, if a SPORS member retired at age 55 with 25 years of service, this individual would only replace approximately 46 percent of their pre-retirement income through their VRS benefit (1.85 X 25). Similarly, VaLORS members would only replace approximately half of their pre-retirement income through their VRS benefit if they retire at age 55 with 25 years of service (25 years of service X 2.0 multiplier). Without Social Security, and assuming pre-retirement earnings of $40,000 a year, members of these plans would need to replace between 42 and 38 percent of their income through other means, making an affordable retirement less likely at that time.

To assist SPORS members in bridging the income replacement during the period in which these individuals are not yet eligible to receive any form of Social Security, these employees are also eligible for a hazardous duty supplement, which begins when the employee retires and ends when the employee reaches Social Security's normal retirement age. Currently, the hazardous duty supplement is $1,038 per month through June 30, 2013, and is updated by the VRS Board of Trustees every two years.

Table 5 compares income replacement rates for SPORS and VaLORS retirees at age 55 and 25 years of service to Mercer's recommended income replacement targets for each salary level. To calculate SPORS members' income replacement rates, the hazardous duty supplement was included.

Table 5: During Years Between VRS Retirement Eligibility and Social Security Eligibility, Most SPORS and VaLORS Employees Will Experience Income Replacement Gap

		SPORS Members		VaLORS Members	
Salary Level	Mercer's Recommended Replacement Target	Income Replaced Through VRS Benefits (Age 55 & 25 Years of Service)[a]	Gap Between Replacement Target and VRS Benefits	Income Replaced Through VRS Benefits (Age 55 & 25 Years of Service)	Gap Between Replacement Target and VRS Benefits
$40,000	88%	77%	-11%	50%	-38%
60,000	80	67	-13	50	-30
80,000	79	62	-17	50	-29

[a] SPORS benefit includes the temporary hazardous duty supplement, which is available until the Social Security normal retirement age. After reaching the Social Security normal retirement age, the SPORS benefit would decrease to approximately 46.25% of pre-retirement income for members with 25 years of service. SPORS members with fewer than 20 years of service are not eligible for the hazardous duty supplement.

Note: This analysis assumes the individual retires at age 55 with 25 years of service, which is allowable under the provisions of the two plans, but is earlier than the earliest age at which an individual may receive any form of Social Security benefit. The benefit multipliers for SPORS and VaLORS are 1.85 percent and 2.0 percent, respectively.

Source: Mercer and JLARC analysis of SPORS and VaLORS plan features.

According to Mercer, it is appropriate to provide unreduced benefits to hazardous duty / law enforcement employees before the earliest retirement age under Social Security due to their job duties and potential risks to the employee, employer, and public associated with these employees performing job duties at older ages. However, because Social Security is a significant bridge between a retiree's VRS benefits and their target income replacement needs, the employee may need to, and, according to JLARC staff interviews with public safety employees, often do, defer retirement by working elsewhere after they officially retire from the State or local governments.

HEALTH CARE COSTS ARE A PRIMARY REASON WHY EMPLOYEES DO NOT RETIRE WHEN THEY ARE ELIGIBLE

Based on survey results, it appears that affordability remains the primary driver of an eligible employee's decision about when to retire. Sixty-five percent of State employee survey respondents who are eligible to retire, but have not, reported that they have delayed retirement because it is unaffordable. Similarly, as previously noted, 39 percent of respondents who knew what they would do when they were eligible for retirement said they would likely delay retirement because they anticipate that the VRS benefit amount would not provide them with sufficient income at retirement.

Retiree Health Insurance Credit

Retirees with more than 15 years of service are eligible for a monthly health insurance credit of $4 per year of service. However, even with this credit, the cost of participating in the State's basic single-coverage health insurance plan for a retiree with 30 years of service would increase from $43 per month while employed to $380 per month in retirement.

The rising costs of health care appear to be a primary reason why many employees have chosen to defer retirement. The State provides some relief from retiree health insurance costs by providing employees with at least 15 years of service a credit toward the cost of their health insurance. However, of those who said they were dissatisfied or very dissatisfied with their retirement benefit, 53 percent said they were mostly dissatisfied with the retiree health insurance credit amount. In focus groups, State and local employees also expressed concerns about the effect of increasing costs of health insurance on their ability to retire. This is consistent with JLARC staff's findings in 2008 that three-quarters of retirement-eligible employees reported being unable to retire because doing so was unaffordable. In that study, a majority of these employees cited the cost of health insurance as the primary reason.

JLARC staff's 2008 compensation study provides an illustration of why health insurance premiums make it a challenge for employees to retire early (prior to the normal retirement age and eligibility for Social Security and Medicare). According to the 2008 analysis, although the retiree health insurance credit is available to mitigate the impact of the cost increase, the employee portion of health insurance premiums still rises from about one percent of pre-tax monthly income for an active employee to about 20 percent for an early retiree. The increase is less substantial for employees who retire when they are eligible for Social Security and Medicare. No changes have been made since the 2008 study that would have affected these findings significantly.

To illustrate the significance of the shift in health care costs to retirees, Mercer conducted an analysis of what income replacement needs would be if retirees experienced no change in health care premiums at retirement. Table 6 shows the increase in income replacement needs solely because of the increased cost of health insurance at retirement relative to when the individual is employed. For low-income earners, basic retiree health insurance will require the individual to replace as much as an additional 12 percent of his or her pre-retirement income at retirement.

While Mercer did include the shift of the costs of health insurance at retirement to retirees in calculating its recommended income replacement targets, which are discussed earlier in this chapter, rising health care costs could increase the target replacement needs even further in the future.

Table 6: Cost of Retiree Health Insurance Increases Income Replacement Needs by Three to 12 Percentage Points

Pre-Retirement Income	Mercer's Income Replacement Ratio Without Increase in Health Insurance Costs	Mercer's Recommended Income Replacement Ratio (With Increase in Health Insurance Costs)	Income Replacement Needs Attributable to Increase in Health Insurance Costs
$20,000	87%	99%	+12%
30,000	84	92	+8
40,000	81	88	+7
50,000	78	83	+5
60,000	76	80	+4
70,000	76	79	+3
80,000	76	79	+3

Note: Mercer's recommended income replacement rate includes the VRS-administered health insurance credit available to an employee with 30 years of service at retirement. Employees with fewer than 30 years of service would experience higher health insurance costs. In addition, Mercer only included the increase in retirement income needs to cover retiree-only (single-coverage) health insurance. Mercer notes that income replacement targets could be adjusted to as low as ten percent less than those listed.

Source: JLARC staff analysis of Mercer data.

Chapter 4

Fully Funding Benefit Costs Is Key to Improving System's Financial Status and Sustainability

In Summary

State and local government retirement plans nationwide have recently experienced significant funding challenges which stem from diminished resources to pay for the plans' costs. Despite changes to the Virginia Retirement System's defined benefit plans in 2010 and 2011, concerns about the plans' costs remain. The unfunded liabilities for the five State-supported plans are estimated to total $19.9 billion in 2011 compared to $17.6 billion in 2010. The unfunded liabilities are a significant determinant of the plans' costs and have developed because of numerous factors, including the impact of the recession on the trust funds' investment returns and the State's tendency to contribute less than what is necessary to fully fund benefit costs. Making the necessary contribution is cited by experts as a key factor in the sustainability of defined benefit retirement plans. Maintaining the plans will require a more consistent commitment to funding the plans' costs and clearer goals regarding the financial status of the plans.

Increasing liabilities combined with less revenue have raised questions about the financial sustainability of the Virginia Retirement System (VRS) retirement plans for State and local employees. In part due to the national economic decline, the liabilities of the VRS retirement plans have grown and are expected to increase for the next ten years. At the same time, the State and local governments have fewer resources available to make progress toward erasing those liabilities. These cost concerns are not unique to Virginia. In fact, the State's overall prudent management of the retirement system, particularly with respect to plan design decisions, while not preventing fiscal challenges, has made these challenges less severe than is the case in many other states.

Recent interest in modifying elements of the VRS retirement plans—including eliminating the defined benefit plans—has been aimed at reducing the plans' liabilities and associated costs to the State and local governments. However, despite benefit reductions in 2010 and 2011, the plans' liabilities are projected to continue to increase.

Maintaining the defined benefit plan for State and local employees will require greater commitment to funding the costs of the retirement plans. Because of lower projected investment returns, a greater portion of plan costs will have to be covered by payroll-based contributions into the plans. Contribution rates that are below what is recommended to make progress toward erasing outstanding liabilities will exacerbate these costs and possibly result in greater taxpayer expenditures in future years.

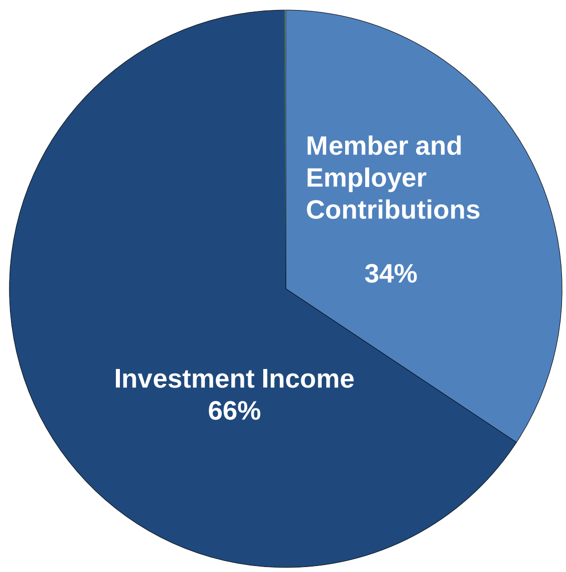
INVESTMENT RETURNS PAY FOR MAJORITY OF PLANS' COSTS

Funding of Teachers' Retirement Benefits

The State reimburses localities for approximately 55 percent of the cost of retirement benefits for the number of teachers required by the State Standards of Quality (SOQ). The amount is calculated as a percentage of total SOQ-covered salaries. When including those school teachers and salaries that are not covered by the SOQ, VRS estimates that the State pays about one-third of the total employer contributions required for teachers' retirement benefits.

The bulk of the retirement plans' costs are paid for from investment earnings on the trust fund in which the plans' assets are held. As of June 30, 2011, the value of the trust funds' assets was estimated to be $54.5 billion. Costs that are not covered by investment income are paid through member and employer contributions. Costs include benefit payments to retirees and beneficiaries, the pre-funding of future benefits for active and deferred members, and the funding of outstanding liabilities. Figure 5 illustrates the average portion of the plans' costs that have been funded by investment earnings over the past 20 years.

Figure 5: Investment Earnings Have Accounted for Majority of Resources Available to Pay Benefit Plans' Costs (FY 1992-FY 2011)



Note: For most of the time period shown, member contributions were paid by the State and local employers on employees' behalf.

Source: JLARC staff analysis of VRS data, FY 1992-FY 2011.

In 2010, due to the weakened market outlook, the VRS Board of Trustees approved a reduction in the assumed rate of return for the trust fund from 7.5 percent to seven percent. This means that the actuary has assumed that VRS will earn less in investment income to cover the plans' expenses and liabilities. As a result, contributions into the fund will need to cover a greater portion of the retirement plans' costs, and will therefore need to increase.

Every year the VRS actuary calculates the amount of funds the State should contribute to the retirement plans to pay for the cost of benefits and outstanding liabilities. This amount is referred to as the "employer contribution rate." Separate employer contribution rates are calculated for the five State-supported plans of State employees, teachers, State Police, other Virginia law officers, and judges. Each local government has its own unique employer contribution rate. Because of changing assumptions and plan experience, the contribution rates change from one actuarial valuation to the next. In order for the rates to take effect, the VRS board must certify these rates, and in most cases it has certified the rates recommended by the actuary. The VRS board-certified rates become the official rates that are cited in the Commonwealth's Annual Financial Report. Whereas new rates are calculated each year, only the rates calculated in the odd years (such as 2011) are subject to board certification and are used for the upcoming biennial budget.

These contributions are calculated as a percentage of payroll and constitute the bulk of the State's costs for maintaining the defined benefit program. In FY 2011, the employer contributions required to fully fund benefit costs totaled $1.7 billion for all plans (including those for political subdivisions and teachers), $1.3 billion for the teachers' and political subdivisions' plans, and $400 million for the four plans that are exclusively for State employees.

JLARC Actuarial Audit

Section 30-81D of the *Code of Virginia* requires JLARC to complete an actuarial audit of VRS every four years. The purpose of this audit is to perform an independent verification and analysis of the assumptions and methods used by the VRS actuary in accounting for the retirement plans' assets, liabilities, and associated costs.

There are a number of assumptions used by VRS and its actuary in calculating the plans' assets and liabilities, and thus the necessary contribution rates. These assumptions are approved by the VRS board and are both demographic (such as the age at which employees are likely to retire in the future) and economic (such as future investment returns). These assumptions are changed periodically based on decisions made by the board. Economic assumptions (summarized in Table 7) are a greater determinant of plan costs than demographic assumptions. The demographic assumptions are reviewed and adjusted if necessary every four years. The economic assumptions are reviewed annually.

Table 7: Economic Assumptions Made by VRS Actuary in Calculating Plans' Assets and Liabilities

Assumption	Description
Rate of Investment Return	7.0%
Inflation Change	2.5% per year
Payroll Growth	3.0% per year
Amortization Period	30 years[a]

[a] Previously 20 years. The VRS Board of Trustees approved the use of a 30-year amortization period in calculating plan assets and liabilities for the 2011 actuarial valuation. The amortization period will decrease by one year each year until it reaches 20 years, at which point it will continue to be 20 years.

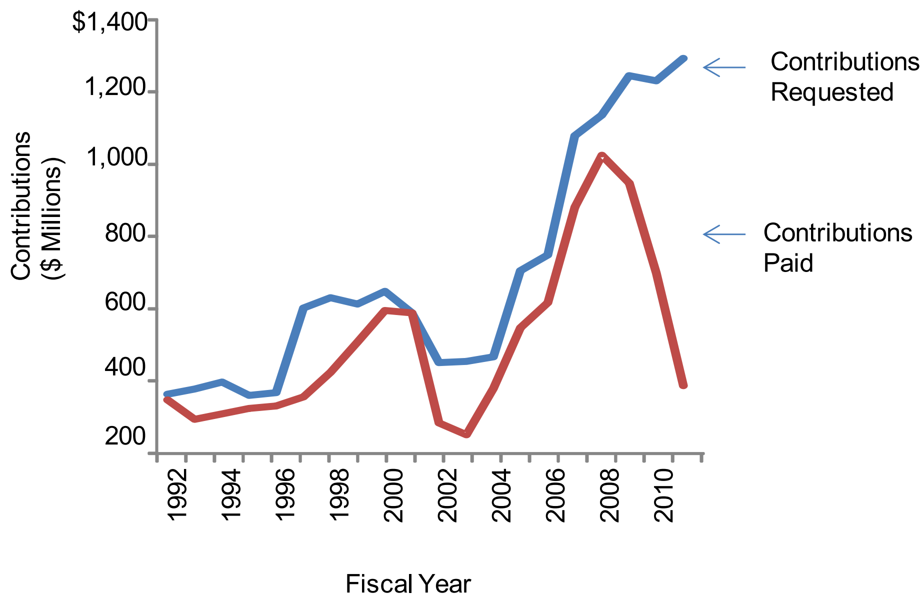
Source: JLARC staff analysis of 2011 valuation of VRS retirement plans.

STATE'S CONTRIBUTIONS ARE SMALL PROPORTION OF OVERALL STATE BUDGET, BUT HAVE INCREASED

For FY 2011, the State budgeted $627.7 million for contributions to VRS, including the employer-paid member contribution for the Plan 1 members who were not yet paying five percent of their salary to the plan and including the appropriation for the State's contributions to the teachers' benefit costs. This represents 1.58 percent of the total State budget for that fiscal year and 1.61 percent of the operating budget.

While the total contributions into the trust funds represent a small percentage of overall State spending, the rate at which the requested contributions have increased has raised concerns about the future affordability of the plans. Compared to 2000, the amount of employer contributions requested by VRS for the State-supported plans, including the teachers' plan, had nearly doubled in 2011 (Figure 6).

Figure 6: Requested Contributions Have Increased Over Time



Note: Includes full total contributions made to the teachers' plan, 55 percent of which is paid by the State and 45 percent by the local school divisions on the payroll attributable to SOQ-covered positions. Contribution calculations are based on total creditable compensation reported for the fiscal year and are in nominal dollars. These amounts do not include local plans.

Source: JLARC staff analysis of VRS data.

Table 8 summarizes the VRS actuary's recommendations for employer contributions into the plan for the 2013-2014 biennium. These contributions represent the cost of these plans to the State, which have increased by an average of 30 percent between 2009 and 2011. The State employees' plan rates experienced the great-

Table 8: Costs of the VRS Plans to the State Are Reflected in Actuary's Recommended Contribution Rates, Which Are Based on Payroll

Defined Benefit Plan	2009 Valuation Recommended Rates (for 2011-2012 biennium)	2010 Valuation Informational Rates[a]	2011 Valuation Recommended Rates[b,c] (for 2013-2014 biennium)
State Employees	8.46%	13.29%	13.07%
State Police (SPORS)	25.56	33.31	32.62
Law Officers (VaLORS)	15.93	20.31	19.52
Judges (JRS)	46.79	55.13	54.11
Teachers	12.91	17.41	16.77

Note: Rates shown are net of the five percent member contribution that is mandated by the *Code of Virginia*.

[a] Valuations performed in even years are for information purposes only and do not result in a change to the rates recommended by the actuary for that year.
[b] 2011 recommended rates were calculated based on a board-approved 30-year amortization period, as opposed to a 20-year amortization period. Had the board maintained its policy of a 20-year amortization period, the rates would be higher by an average of eight percent. For the State employees' and teachers' plans, however, the difference is 18 percent and 16 percent, respectively.
[c] Approximately one percentage point of the 2011 rates for State employees is attributable to the requirement adopted by the General Assembly in 2011 that the State pay back approximately $1.1 billion in general and non-general funds that were promised but not paid into the five State-supported plans in 2010. This amount is to be paid back to the trust fund over a period of ten years at a seven percent interest rate. This payback accounts for 3.08 percent for SPORS, 1.8 percent for VaLORS, 3.29 percent for JRS, and 1.43 percent for teachers.

Source: 2009, 2010, and 2011 actuarial valuation of State-supported defined benefit plans.

est increase (54 percent) over this time period. The rates recommended by the actuary for the State employees' and teachers' plans for the 2013-2014 biennium are more than double what the State budgeted for contributions to those plans for FY 2012.

FUNDED STATUS OF THE VRS DEFINED BENEFIT PLANS HAS DECLINED AND IS EXPECTED TO WORSEN IN FUTURE YEARS

Pension Protection Act
The 2006 Pension Protection Act for private sector defined benefit plans was in part designed to increase the minimum funding requirements for pension plans. Under the Act, an 80 percent funded ratio is seen as the minimum acceptable funded ratio that is required before benefit restrictions or higher contributions are required.

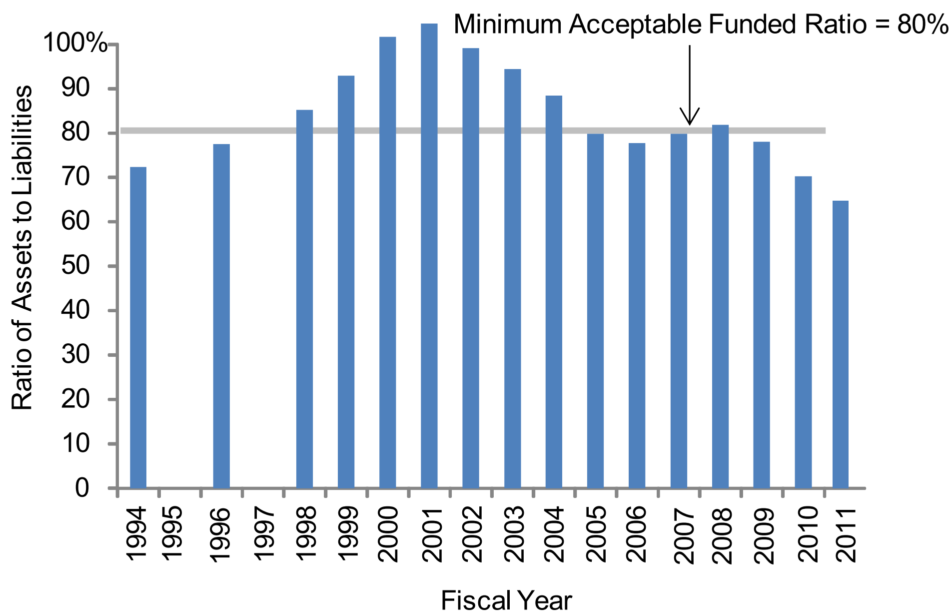
The most common measure of a retirement system's financial health is its actuarial funding ratio, which is the ratio of accumulated assets to actuarial liabilities. A plan whose ratio is 100 percent is considered "fully funded." A ratio of less than 100 percent—being "underfunded"—does not necessarily mean that the plan is not financially sound. According to the Government Accountability Office, actuaries generally consider a system to be well funded when assets cover more than 80 percent of liabilities.

Over time, a defined benefit plan's funded ratio can be used as an indicator of whether or not the trust fund is accumulating enough assets to pay the future benefits the plan sponsor has promised. A persistently low, or declining, funded ratio indicates that the employer—in this case the State and local governments—may not have sufficient assets to pay for the benefits they have obligated themselves to provide.

VRS has generally been considered by actuaries to be a financially sound system. The aggregate ratio of assets to liabilities when summed across all State-supported plans has been at or above the

80 percent level in ten of the past 18 years (Figure 7). Because plan experience rarely conforms to the assumptions, it is typical for pension plans to have some amount of unfunded liability, and therefore a funded ratio below 100 percent.

Figure 7: Aggregate Funded Ratio Has Often Met or Exceeded 80 Percent



Note: Because different standards and parameters were used for valuations conducted prior to 1994, the data for earlier years are not comparable and so are not included in this figure. Prior to 1998, actuarial valuations were only conducted every other year, so valuation data for 1995 and 1997 are not available. Investment performance is reported net of fees. The figure does not include data for the political subdivision plans.

Source: JLARC staff analysis of VRS data.

Proposed GASB Changes

Governmental Accounting Standards Board (GASB) proposed changes affect several aspects of pension accounting. They would alter the manner in which liabilities are valued and, if adopted, would result in a decrease in most pension plans' funded status. The proposed changes are currently undergoing public comment. Final rules are expected in 2012.

However, projections of future funded status indicate that funded ratios are expected to continue to decline in the near term, due largely to the impact of the investment losses experienced in 2008 and 2009, which will be directly factored into the plans' costs through 2013. In 2009, the State employees' and teachers' VRS plans were funded at 84 percent and 76 percent, respectively. Based on the 2010 actuarial valuation of the VRS plans, this had declined to 75 percent for the State employees' plan and 69 percent for the teachers' plan. The 2011 actuarial valuation showed that the plans' funded status had further declined to 70.6 percent and 66.6 percent respectively. In fact, a comparison of the two most recent valuations shows that, from 2009 to 2011 the gap between the VRS liabilities and the assets on hand to pay for them increased by 69 percent from $11.8 billion to $19.9 billion. Projections by the VRS actuary are that the funded ratios for the State employees' and teachers' plans could decrease to 63 percent and 61 percent, respectively, in 2013.

This experience is consistent with that in other states. Nationwide, the funded status of states' pension plans has been declining. In FY 2009, according to a Pew Center on the States report, state pension systems were slightly less than 78 percent funded, which Pew estimated to be a six percentage point decrease from funded levels the year before. For Virginia and other states this declining funded status is due to a decline in the resources available for or being dedicated to the plans' costs.

Actuarial Smoothing

VRS does not recognize the full amount of one year's investment gains or losses in a single year's actuarial valuation. Instead, the deviations from the expected return (gains or losses) are factored in over a period of five years, a practice known as "actuarial smoothing," a generally accepted actuarial practice. This avoids a "shock" to the rates requested of employers and results in relatively level contribution amounts being requested from year to year. It also results in extending the time period over which the plans are impacted by potentially extreme underperformance in a single year. The valuation that occurs in 2013 will reflect the final one-fifth of the 21 percent loss experienced in FY 2009.

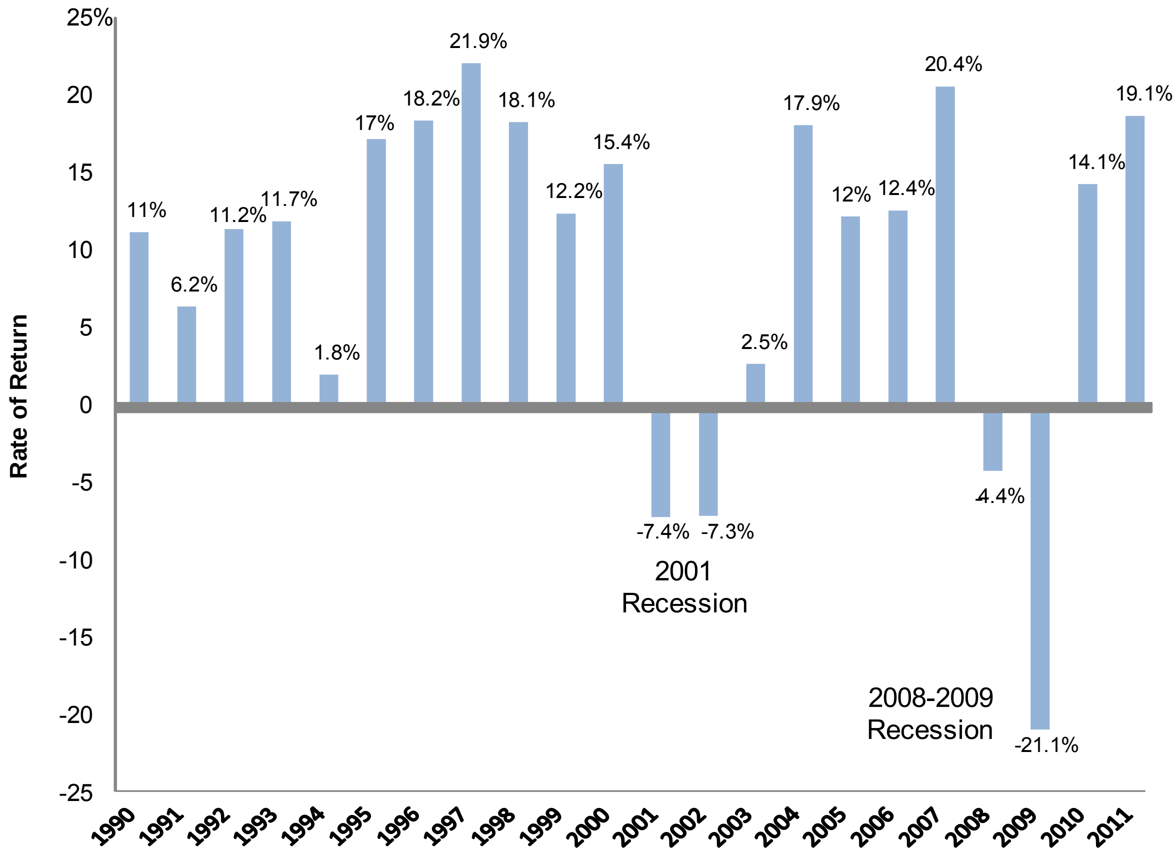
The 2011 actuarial valuation of the VRS defined benefit plans calculated that approximately $1.7 billion of the plans' actuarial losses was due to the underperformance of investments relative to the rates of return assumed by the actuary for 2010 and 2011. While investment performance in 2010 and 2011 exceeded the actuary's assumed rate of return, investment losses experienced in 2008 and 2009 must still be factored into the plans' valuation. Because VRS uses the practice of actuarial smoothing, a portion of the -4.4 percent asset value decline experienced in FY 2008 and -21.1 percent asset value decline in FY 2009 were recognized in the 2011 valuation. The 2013 valuation is the last year that these substantial losses will be factored into determining the plans' liabilities, which will affect contribution rates for the 2015-2016 biennium.

The combined investment losses experienced in 2008 and 2009 were substantial, but the underperformance was due largely to the economic recession. The performance of the VRS trust funds during this period was similar to that of other pension plan trust funds nationwide. Since 2009, the trust funds have nearly recovered from the losses experienced during the recession and as of June 30, 2011 the assets totaled $54.5 billion, gaining $12 billion since June 30, 2009. Figure 8 shows the rate of return earned on the trust funds' assets each year as of June 30 since 1990. Since 1990, the trust funds have exceeded the rate of return assumed by the VRS actuary 15 times.

Another factor contributing to the decline in funded status is the historical gap between the annual required contributions certified by the VRS board and those made by the State. In the 2011 State plans' valuation performed by the VRS actuary, $1.6 billion in increased liabilities was attributed to the underfunding of the recommended contributions in 2010 and 2011.

The underfunding of the contribution rates is further compounded by the declining number of active members in the VRS plans. Not

Figure 8: VRS Investments Have Generally Performed Well Over the Past 20 Years



Source: JLARC staff analysis of VRS data.

only have the contributions been less as a percentage of total payroll than what the actuary has determined are necessary, they have been based on a declining total payroll due to a contraction of the State and local workforce. If the payroll base on which the contributions are made continues to shrink, fewer dollars will flow into the funds because those dollars are calculated as a percentage of that payroll.

COMMITMENT TO CONSISTENTLY PAYING ACTUARIALLY RECOMMENDED CONTRIBUTIONS IS KEY TO REDUCING FUTURE PLAN COSTS

There is no statutory requirement that the employer contribution be fully funded in a given year. However, the Governmental Accounting Standards Board (GASB) recommends that pension plan sponsors fully pay their annual required contribution each year to ensure that the plan will eventually accrue enough assets to pay for its total liabilities. Compliance with GASB recommendations is one factor that bond ratings agencies consider when evaluating the State's credit worthiness.

There are always numerous competing demands for public funds. Each year, the General Assembly and localities pass budgets based on projected revenues and citizen demands and needs for service. When the costs of particular programs are increasing from year to year, the State and localities must balance the importance of funding these costs with the risks that they could "crowd out" spending in other areas that may benefit a broader group of citizens. With respect to the retirement plans, however, because the costs are associated with a future benefit that the State and local governments have obligated themselves to pay, underfunding these costs represents a temporary solution for addressing immediate priorities and only results in deferring these expenses into the future.

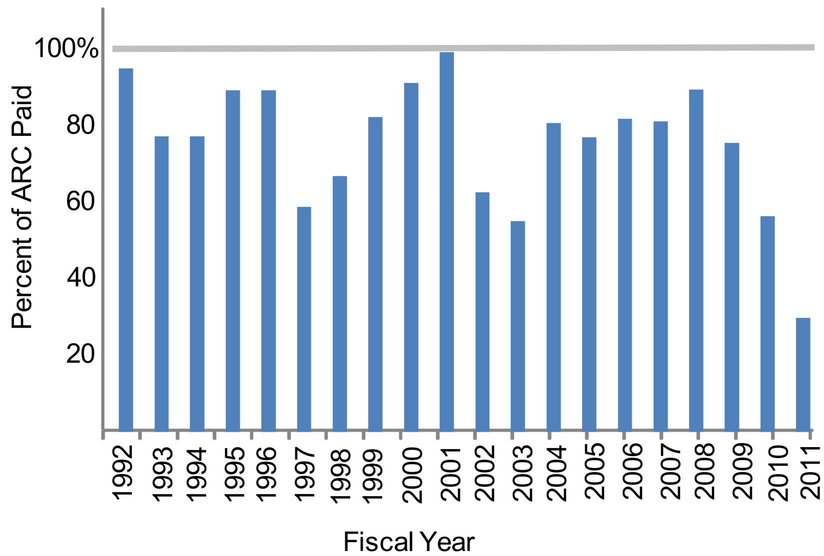
In Most Years, the State Has Funded Only a Portion of the Amount Necessary to Ensure That Assets Will Be Sufficient to Cover the Cost of Future Benefits

Pension funding experts have emphasized the importance of funding the annual required contribution (ARC) for the financial health of public pension plans. Researchers at the Center for Retirement Research at Boston College and the Government Accountability Office have also emphasized the importance of paying the full ARC for retirement plans' financial health. The VRS actuary also recently stated that fully funding the recommended contributions is "key to maintaining the pension plan on a sound basis."

By not making the full contribution, the State loses the benefit of the compounding interest that would have been earned on the contributed funds. Had the employer contributions for the State employees' and teachers' plans been funded according to VRS recommendations in the past 20 years, VRS estimates that the trust fund would have ten percent more in assets, or $5.7 billion, than is currently the case even though the amount recommended but not funded totaled less than that. This is because, by not contributing the full ARC, the State is losing the benefit of the investment returns that would have been earned on those contributions.

Figure 9 illustrates that the contributions made by the State to the five State-supported plans have frequently been less than the amount recommended by the VRS actuary, using the board-approved assumptions. Since 1992, the State paid 100 percent of the ARC for each of the plans only once, which occurred in 2001. Since 1992, the State employees' plan rates have been fully funded in only four years, and the teachers' plan rates have been fully funded in only two years.

Figure 9: Percent of Recommended Contributions Paid for State-Supported Plans



Source: JLARC staff analysis of data provided by VRS.

JLARC's 2008 compensation study highlighted the importance to the State's future financial risk of paying the full contribution as recommended by the VRS actuary. In the three years since that study, the difference between the ARC and the State's contributions has increased by more than four times (1.59 percentage point difference in 2007 versus 6.33 percentage point difference in 2011).

According to data compiled by the Pew Center on the States, in 2009 Virginia ranked 37th among state pension systems in the percent of the ARC that was funded.

According to data compiled by the Pew Center on the States, in 2009 Virginia ranked 37th among state pension systems in the percent of the ARC that was funded. Thirty-three states paid 90 percent or more of the ARC. States that paid 90 percent or more of the ARC, and those whose required payments were equal to or greater than Virginia's, include California, Florida, Ohio, New York, and Texas. Finally, 12 states had liabilities that exceeded Virginia's in 2009, and nine of them paid as much or more to their liabilities as Virginia, measured as a percentage of the ARC.

Historical Tendency to Underfund the Costs of the Retirement Programs Has Contributed to Increased Costs

Because the VRS actuary assumes that the full contribution will be made, contribution shortfalls create new liabilities. Mercer observed in its work for this study that "a sustainable and affordable retirement program is easier to operate and budget for. The Commonwealth's not funding the actuary's recommended contributions needs to be addressed." As stated in JLARC's 2008 compensation study, contributing less than the actuary's recommendations to

States With Well-Funded Pensions Have Consistently Paid Costs

A 2011 study by the National Institute for Retirement Security highlighted the practices of six well-funded pension plans. A key factor in these states' ability to remain well funded despite the recession was the states' commitment to paying the full amount of the ARC.

plan costs contributes to a decline in the financial health of the VRS plans. In the 2008 study, JLARC staff reported:

> If the trend of paying less than the ARC continues, the resulting decline in funded ratios will require future generations of taxpayers to bear a larger portion of the liabilities associated with providing retirement benefits to current employees. These liabilities manifest themselves in the form of a higher ARC in years to come.

To update an analysis performed for the 2008 study by PricewaterhouseCoopers of the impact of underfunding the ARC, Cavanaugh Macdonald actuaries recalculated the VRS projections of the future unfunded liabilities and associated future ARCs under the assumption that 75 percent of the ARC would be paid instead of 100 percent, using the board-approved actuarial assumptions (Table 9). By those calculations, the unfunded liability for the five State-supported plans would increase by an additional $34.4 billion over the next ten years. This scenario would result in higher contributions of approximately $314 million in FY 2022. This substantial difference in the required contribution—even over a relatively short period of time—underscores the budgetary impact of creating larger liabilities in the future by not fully funding the required ARC as certified by the VRS board.

Table 9: Shortfalls in Funding for VRS Board-Certified Rates Necessitate Higher Contributions in Future Years

	Projected Rates as % of Payroll in 2022		Difference Between 100% and 75% Paid	
	If 100% Paid Annually	*If 75% Paid Annually*	*%*	*$ (millions)*
Regular VRS	17.57	19.46	1.89	$89.1
SPORS	40.05	44.77	4.72	5.3
VaLORS	21.19	23.72	2.53	11.5
JRS	43.24	49.19	5.95	5.4
Teachers	18.36	20.53	2.17	202.9
Total				*$314.2*

Note: Based on projected payroll in 2022.

Source: Cavanaugh Macdonald actuaries.

ESTABLISHING GOALS AND OBJECTIVES FOR THE RETIREMENT PLANS' FINANCIAL STABILITY COULD HELP STABILIZE FUTURE COSTS

In order to control the predictability and magnitude of the defined benefit programs' costs, the State may benefit from adopting a clear policy on the manner in which the programs are funded. Despite the demonstrated importance of abiding by the funding principles of the Commonwealth's retirement programs, few provisions in the *Code of Virginia* provide clear guidance on the funding policies or practices to which the State should adhere. Section 51.1-145(K) of the *Code* states that

> the appropriation bill which is submitted to the General Assembly by the Governor…shall include the contributions which will become due and payable to the retirement allowance account…[and] the amount of the contributions shall be based on the contribution rates certified by the [VRS] Board [of Trustees]…

As mentioned previously, the VRS Board of Trustees typically certifies the rates that are recommended by the VRS actuary, using the board-certified demographic and economic assumptions. While the funded rates are often less than the board-certified rates, the board-certified rates are typically used as the initial basis for the funded rates. For example, the funded rates have often been based on a recalculation of the actuarially recommended rates, using less conservative economic actuarial assumptions than those approved by the Board of Trustees. Basing payments on less conservative assumptions effectively reduces contributions paid into the trust funds and reduces the earnings potential for those funds.

The *Code of Virginia* does not include specific goals that the Commonwealth should seek to achieve and maintain with respect to the financial health of its defined benefit programs. Including such language in the *Code* could improve the consistency with which the plans are funded in accordance with the VRS board's actuarial recommendations. This consistency could, over time, lessen the likelihood that the rates will increase from one valuation to the next and the magnitude of the increases that do occur.

In order to establish a State policy for the financial health of the defined benefit plans, the *Code of Virginia* could be amended to identify an acceptable minimum funded ratio for each VRS defined benefit plan. The *Code* could further be amended to require that a fiscal impact analysis be conducted if the employer rates that are paid are less than the recommended rates. This analysis would be performed as part of the General Assembly's normal process for developing the State budget and would be completed prior to a vote on the budget. Should the Commonwealth's budget priorities result in contribution rates that are less than those certified by the VRS board for any of the defined benefit plans, a fiscal impact statement could be required that would illustrate the impact of those rates on the funded ratio goals and the unfunded liabilities of the plans over the next ten years, and on future required contribution rates over at least the next two biennia.

Other states with well-funded public pension programs have instituted more prescriptive legislative provisions than the Commonwealth follows with respect to funding the programs' costs. The following two case studies are examples.

Case Study - Idaho Public Employee's Retirement Fund

Idaho maintains a "Rate Stabilization Reserve" that is funded by an additional contribution rate intended to cover potential unfunded liabilities that could be created by adverse market conditions. This is coupled with a provision that the retirement board cannot request a contribution rate that is below the "normal cost" of the plan, plus the payment required to fund any outstanding liabilities within 25 years. As a result, the contribution rates have remained relatively stable and predictable.

Case Study - Texas Teachers Retirement System

The Texas state constitution requires that the legislature establish a member contribution rate of at least six percent. In 2007, the legislature passed a law requiring the employer contribution to be at least equal to the member contribution. According to a review of the retirement system by the National Institute for Retirement Security, this policy has resulted in stable employer contribution rates.

Recommendation (1). The General Assembly may wish to amend the *Code of Virginia* to specify a minimum acceptable funded ratio for each State-supported defined benefit retirement plan. This funded ratio should be consistent with a funded ratio that actuaries and retirement plan experts generally consider to be acceptable.

Recommendation (2). The General Assembly may wish to require that a fiscal impact analysis be conducted in any year in which the proposed employer contribution rates to the trust funds of the Virginia Retirement System (VRS) for the defined benefit retirement plans are less than those certified by the VRS Board of Trustees. This analysis should (i) measure the impact of the proposed contribution rates on the funded status of the respective plans over the next ten years, (ii) measure the impact of the proposed contribution rates on the future contribution rates that will be required over at least the next two biennia, and (iii) be conducted using the board-approved actuarial assumptions.

Adopting clearer goals for the financial health of the defined benefit plans and funding the plans' costs in stricter accordance with the plans' actuaries will help ensure that the defined benefit programs are maintained for the current and future public workforce. However, the Commonwealth does have options for modifying elements of the defined benefit programs to reduce future costs. Potential modifications are presented in the next chapter.

Chapter 5

Modifications to Defined Benefit Plans Could Reduce State's Future Financial Obligations, but Will Not Eliminate Accrued Liabilities

In Summary

There are several options for modifying the defined benefit retirement plans in order to reduce costs, but changes could diminish the effectiveness of the plans. The impact of these changes on the effectiveness of the retirement plans and on the State's future costs would vary depending on the segment of the workforce to which they would apply and the manner in which they were implemented. In general, each of the options would slightly reduce the benefit guaranteed to future retirees, reduce the amount of inflation protection provided to future retirees, and require plan members to bear a greater portion of the costs and risks of the retirement plans. Legal constraints limit the options available to the State, and those options that are available will likely result in relatively moderate future cost reductions. Modifications considered for the defined benefit plans available to State employees could also be considered for political subdivision and school division employees.

The mandate for this study asks JLARC staff to review whether the current retirement plans for State and local employees are achieving their purposes, and, if they are not, to discuss how they should be changed. As discussed in Chapters 2 and 3, the plans are effective at recruiting and retaining employees and allowing employees to retire at an appropriate time with adequate income. Based on these measures, it does not appear that any changes to the existing plans are necessary.

However, concerns remain about the sustainability and affordability of the current benefits. The costs of the plans are expected to continue to increase, and the resources available to pay for these costs are expected to remain level or decline. As the economy recovers from the recent recession, additional resources will likely flow into the Virginia Retirement System's (VRS) trust funds to cover outstanding liabilities. However, economic recovery is expected to occur gradually over a protracted period.

Modifications could be made to the existing retirement plans to reduce liabilities and associated costs over the next ten years. However, several factors should be considered before enacting any changes that would reduce the retirement benefits of either current or future employees.

VIRGINIA AND MANY OTHER STATES HAVE RECENTLY MODIFIED THE DEFINED BENEFIT RETIREMENT PLANS TO REDUCE COSTS

According to the National Conference of State Legislatures (NCSL), in 2010 and 2011, 39 states enacted changes to their retirement plans for public employees.

State and local governments nationwide have modified their defined benefit retirement plans as one strategy to reduce benefit costs as well as governments'—and taxpayers'—share of future benefit obligations. According to the National Conference of State Legislatures (NCSL), in 2010 and 2011, 39 states enacted changes to their retirement plans for public employees. The most common change implemented or under consideration was an increase in the contributions employees pay toward the costs of their future benefits. Additional changes included implementing higher age and longer service requirements for qualifying for retirement, as well as reducing the benefits promised to future retirees.

Virginia is among those states that have changed elements of the retirement programs for State and local government employees. Changes enacted in 2010 and 2011 were aimed at reducing costs and future financial benefit obligations for the State and local governments. Collectively, these changes are estimated to reduce the cost of the plans to the State and local governments by $3 billion over the next ten years. (This estimate was contingent on all local plans implementing the provisions; because only a minority have done so, the actual cost savings will likely be substantially less than this estimate.) Despite these changes, the VRS actuary projects that State and local costs for the State employees' and teachers' plans alone will continue to increase at least through 2015, at which point the contribution rates are expected to level off, yet remain at levels higher than recommended in this year's actuarial valuation.

OPTIONS TO MODIFY THE CALCULATION OF RETIREMENT BENEFITS

There are several options for modifying individual aspects of the defined benefit plan in order to reduce the amount of those benefits at retirement, while still maintaining the overall value and effectiveness of the defined benefit plan. These options would not reduce the benefits available to existing retirees and, in some cases, existing employees close to eligibility for full retirement benefits would be exempt.

The primary objective of any modifications to the defined benefit plans is to reduce the costs to the State and local governments of operating these plans. The VRS actuary has calculated the cost impact of each of the options presented below.

The calculations of cost reductions assume that future annual required contributions (ARC) will be paid in full. To the extent that the ARC is not fully funded, cost savings from any plan modifications will be offset by the resulting additional liabilities, yet employees' benefits will be relatively lower than is currently the case. Additionally, while these modifications could reduce costs for future earned benefits, they will not reduce the liabilities the plans have already accrued and which the State is obligated to pay.

As discussed at the end of this chapter, the legality of any benefit modifications that apply to existing employees could be challenged. Options with the greatest immediate cost savings potential have the greatest legal risk. The options presented below have relatively low legal risk.

Finally, any defined benefit plan modifications will have administrative impacts on VRS as well as on the State's payroll system. It may therefore be prudent to allow sufficient time for any plan changes to be implemented to ensure a successful transition to the new benefits structure.

Changes Made to State Plans Could Also Be Applied to Plans for Local Government and School Division Employees

The options presented below include a discussion of how the particular plan design modification would impact members of the four plans for State employees. However, any modification that is made to the plans for State employees could also be considered for the political subdivisions' and teachers' plans. Historically, local governments participating in VRS have in some cases been given the option of modifying their localities' benefit structure according to the changes implemented for State employees.

One concern that both State and local stakeholders have noted is the disparity that this practice has caused among localities in terms of the benefit structures provided, and between localities and the State. The lack of uniformity followed by local governments in implementing these changes tends to make it more difficult for some localities and the State to compete for qualified employees. For example, according to a human resource representative from the Department of Behavioral Health and Developmental Services (DBHDS), several employees have recently left DBHDS to go to work for local community services boards in localities that did not require their employees to pay the five percent member contribution.

In another example, if Virginia State Police officers were required to contribute a greater percentage of their pay to their benefits, but many localities did not enact similar requirements, the State Police could face both recruitment and retention difficulties. According to a representative from the Virginia State Police Association, the number of field vacancies experienced by the Virginia State Police is increasing, underscoring the agency's need to reduce the attrition rate among State police officers. According to this representative, many members of a State police academy class will go to work for a local government police or sheriff's department after they have met their obligatory period of service with the State, which is two years. In many cases, local governments' compensation packages exceed what the State offers, in part due to the uneven adoption of modifications to the defined benefit plans.

The actions taken by localities for their local employees as well as their school division employees illustrate this problem. In FY 2011, of the 588 school divisions, local governments, and commissions or authorities participating in VRS, only 120 (20 percent) required their Plan 2 members to pay the five percent member contribution. (An additional ten shared this contribution with newly hired employees.) A little more than one-third of the local governments enacted this provision. The rest continued to pay the member contribution on behalf of their employees. As a result, some stakeholders have expressed concern that those local governments and the State were put at a competitive disadvantage by those localities that did not pass the member contribution on to their employees.

Political Subdivisions Required to Pay Contributions in Full

Language in the Appropriations Act requires VRS-participating political subdivisions to fully fund the costs of their defined benefit retirement plans. Otherwise, "the State Comptroller shall forthwith transfer such amounts to the appropriate fund from any non-earmarked moneys otherwise distributable to such political subdivision by any department or agency of the State." The State is not obligated to fund the benefits owed to local VRS members.

It may be desirable to require all employers participating in VRS to make similar benefit changes in order to achieve a more unified benefits structure. However, if local governments are required to conform to future benefits changes applied to the State employees' plan, then the fact that the Appropriations Act requires local governments to pay their annual required contributions to VRS in full should be taken into consideration. The potential added costs of some types of benefit changes may not be as easily absorbed by local governments as by the State. Personnel costs reportedly account for a greater portion of localities' budgets and localities are restricted by the *Code of Virginia* in their ability to raise additional revenue to meet increasing costs.

Option 1: Modify the Average Final Compensation Calculation

Projected Impact of Option 1		
$509.5 million cumulative 10-year cost reduction		
Recruitment	Retention	Retirement
○	◗	◗

○ None ◗ Minimal ◍ Moderate ● Substantial

* All impacts are negative

One option available to the General Assembly is to modify the calculation of employees' average final compensation (AFC). The AFC is one factor that determines the amount of employees' future retirement benefits because the benefit is calculated as a percentage of AFC. Currently, the retirement benefits for Plan 1 employees are calculated based on an AFC of the 36 highest consecutive months of creditable compensation (which is typically the individual's gross salary). Plan 2 employees—those hired after July 1, 2010—will have their AFC calculated over a longer time period, 60 months versus 36.

One option that the State could consider for reducing future benefit costs would be to calculate Plan 1 members' future retirement benefits using a 60-month AFC. Like Virginia, in 2010 and 2011, 13 states lengthened the period over which employees' AFC is calculated. If this option is implemented, plan provisions prior to the date of the change should be applied to service accrued up to that date. According to VRS staff, while possible to implement, such a provision would be an administrative challenge. If such an option were implemented, according to VRS staff, techniques could be employed to preserve benefits up to the effective date of the change.

Impact on Retirement Goals. Averaging an employee's compensation over a longer time period generally reduces the final compensation that the retirement benefit is based on, thereby reducing the benefit. For example, an employee whose highest consecutive 36 months of creditable compensation is $45,000, $46,000, and $47,000 will have their benefit under a three-year AFC calculation based on $46,000. If the employee's benefit were based on a 60-month average and the earlier years' compensation was $43,000 and $44,000, then the benefit would be based on an AFC of $45,000, resulting in a slightly lower benefit. These benefit reductions are modest when viewed on an annual basis. The sum total over a 20-year retirement would be approximately $10,000.

It is less likely that this option alone would significantly impair employees' ability to retire at an appropriate time and with adequate income. However, this option may provide employees with some incentive to work longer in order to potentially increase the AFC on which their future benefit is calculated.

Impact on Recruitment and Retention Goals. This change is unlikely to impact the State and local governments' ability to recruit qualified employees because newly hired employees are automatically enrolled in Plan 2, which already contains this provision. In terms of the impact on retention, because employees will perceive this change as a reduction in their future benefits, some could decide to leave State employment. As discussed earlier in this report, the fact that the defined benefit plan provided a guaranteed future benefit is the most highly valued component of the plan by employees. This component would not be modified and, particularly for longer-tenured employees, this would mean that the defined benefit plan would remain an effective retention tool.

Consideration should be given to exempting Plan 1 members who have already reached retirement eligibility or are within five years of reaching eligibility for unreduced retirement from this change, in order to avoid a sharp increase in retirement rates prior to the effective date of the change.

Impact on Future Costs. The VRS actuary analyzed the impact of this change on contribution rates through FY 2022. By the year 2022, contribution rates would be approximately 0.36 percentage points lower for the State employees' plan and 0.53 percentage points lower for the teachers' plan. Cumulatively over the ten years the change would result in $509.5 million less in contributions being required for the State employees', SPORS, VaLORS, JRS, and teachers' plans. Because this change impacts current employees, a portion of these cost reductions would be realized immediately. As stated above, consideration should be given to applying any changes to political subdivision plans as well, which would result in cost savings for local governments.

Option 2: Reduce the Benefit Multiplier

Projected Impact of Option 2

$165.5 million cumulative 10-year cost reduction

Recruitment	Retention	Retirement

None Minimal Moderate Substantial

* All impacts are negative

Changes to the benefit multiplier were not commonly pursued by states in 2010 and 2011. The benefit multiplier determines retirees' benefit amount and is a percentage of an employee's creditable compensation. For most VRS members, the benefit multiplier is 1.7 percent of AFC. After a 30-year career, this multiplier produces a fixed, guaranteed retirement benefit of about half of an employee's compensation before retirement.

Mercer's analysis shows that, when paired with Social Security, the VRS benefit multiplier of 1.7 percent provides income replacement within the recommended range for targeted income replacement after a full career. However, the vast majority of VRS members retire several years before eligibility for unreduced Social Security and before a 30-year career. Members of the State employees' plan work, on average, 23 years instead of the 37 years used in Mercer's analysis. Teachers work an average of 24 years. Therefore, the retirement patterns of most employees do not result in benefit amounts within Mercer's targeted range.

Still, the size of the multiplier has a significant impact on the plans' costs because it directly determines the amount of benefits the State and local governments are obligated to pay. The impact of reducing the benefit multiplier from 1.7 percent to 1.6 percent for future hires in the State employees' and teachers' retirement plans was evaluated.

Impact on Retirement Goals. A lower multiplier would mean that those employees hired under this provision would have to work longer than employees with a 1.7 percent multiplier in order to receive identical benefits. However, employees just beginning their working careers are expected to work longer than previous generations. Additionally, existing employees report that they already expect to have to rely on other sources of income to supplement their VRS benefits. Therefore, while a 1.6 percent multiplier could lengthen the time that they will need to work, it is unlikely to significantly impair most employees' ability to retire at an appropriate time and with an adequate income.

While future employees are expected to need to work longer than previous generations to meet their retirement goals, a longer career may not be reasonable for many, particularly those with more physically demanding jobs. These jobs are frequently also the lower salaried jobs. For lower salaried employees whose income replacement needs are highest, their ability to retire with adequate income would be a concern under this option. With 30 years of service at age 60, a 1.6 percent multiplier would provide an income replacement of about 48 percent, versus 51 percent under a 1.7 percent multiplier. With an AFC of $30,000 and 30 years of service, the difference in the VRS benefit paid between a 1.7 and a 1.6 percent multiplier is $900 per year before taxes.

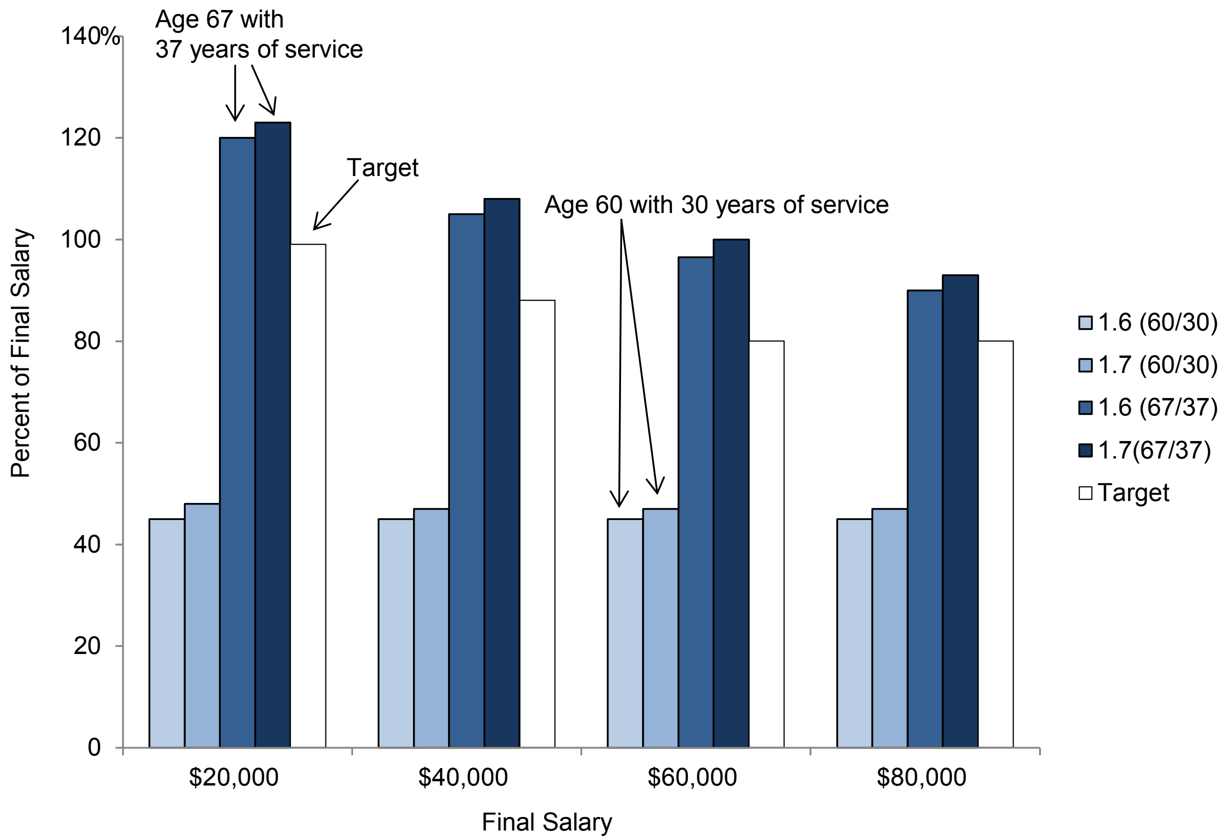
As with the current benefit structure, the adequacy of the income replacement for a 1.6 percent multiplier depends on when the employee chooses to retire. A VRS benefit based on the 1.6 multiplier alone after 30 years—or even when combined with a reduced Social Security benefit—falls short of Mercer's income replacement target. Over a 37-year career, however, and with full Social Security benefits, a 1.6 percent multiplier would replace more than 100 percent of the employee's average final compensation. This is illustrated in Figure 10.

Impact on Recruitment and Retention Goals. According to Mercer, lowering the benefit multiplier from 1.7 to 1.6 would still provide the same recruitment and retention benefits as the current multiplier. However, because the benefit multiplier is one of the most emphasized aspects of a defined benefit plan, employees may focus on it as a measure of the relative generosity of the benefit plan.

Organizations representing employee interests frequently compare the defined benefit multipliers provided by the states. The VRS benefit multiplier of 1.7 percent is below the multiplier provided by many other states' retirement plans. However, these comparisons can sometimes omit important explanatory details. For example, many states with higher multipliers do not participate in Social Security for their employees, so the retirement benefit will be their employees' primary source of retirement income.

Nationally, for states that participate in Social Security, the average benefit multiplier is 1.97 percent. In some states with higher benefit multipliers, employees pay higher contributions towards their benefit costs than is the case currently in Virginia. Data provided by Mercer on seven nearby states indicated that their benefit multipliers range from 1.5 percent to 2.0 percent. Five of these

Figure 10: Lower Multiplier Results in Lower Benefit for Newly Hired Employees



Note: Scenarios that depict income replacement at age 67 with 37 years of service include full Social Security benefits. Scenarios that depict income replacement at age 60 with 30 years of service do not include any Social Security benefits.

Source: JLARC staff analysis of data provided by Mercer, 2011.

states provide a higher multiplier than Virginia. Two of those with higher multipliers require higher employee contributions.

A slightly lower multiplier will be perceived by prospective employees as less generous than that provided by other states, and certainly less generous than that provided to existing employees. It is possible that this change could have a negative impact on the State's recruitment goals. It would also result in a less competitive total compensation package for newly hired employees. Finally, employees hired under this provision could be paying contributions equal to those of employees receiving greater benefits.

Impact on Future Costs. The VRS actuary analyzed the impact of this change on contribution rates through FY 2022. By the year 2022, contribution rates would be approximately 0.32 percentage points lower for the State employees' plan and 0.24 percentage points lower for the teachers' plan. Cumulatively over the ten years the change would result in $165.5 million less in contributions being required for the State employees' and teachers' plans. Because this change would apply only to newly hired employees, savings would not fully materialize until all active employees are under this provision. As stated above, consideration should be given to applying any changes to political subdivision plans as well, which would result in cost savings for local governments.

OPTIONS FOR MODIFYING THE COLA APPLIED TO BENEFITS AFTER RETIREMENT

In its profile of six well-funded public pension plans, the National Institute for Retirement Security identified several common contributors to the plans' financial standing. One of these was the provision of a "modest" COLA for retirees' benefits. While the current COLAs for both Plan 1 and Plan 2 are not considered excessive, in 2008 PwC characterized the COLA as a costly aspect of the retirement plans. While Plan 2 members have a lower COLA than Plan 1 members, additional modifications could be made to achieve greater and more immediate cost savings while still providing future retirees with inflation protection. (The Plan 1 COLA matches the first three percent increase in inflation, versus the first two percent for Plan 2 employees.)

According to the National Conference of State Legislatures, in 2010 and 2011, 17 states reduced COLAs for future hires, active employees, or active employees and retirees. Six of these states applied these reductions to future hires only, five applied the reductions to some portion of active employees, and six reduced COLAs for people already retired and active employees.

In the 2008 compensation study, JLARC and PwC developed an option for modifying the COLA calculation. The change that was enacted for Plan 2 employees is similar to the 2008 JLARC/PwC option, although the latter would have likely produced greater cost savings. The COLA proposed by JLARC staff had a lower cap and would have applied to existing employees, not just new hires.

Option 3: Reduce the Maximum Amount of the COLA for Employees Retiring After the Effective Date of the Change

Projected Impact of Option 3		
$369.3 million cumulative 10-year cost reduction		
Recruitment	Retention	Retirement
○	◉	◗
○ None ◗ Minimal ◉ Moderate ● Substantial		
* All impacts are negative		

Two options that would modify the COLA for future retirees were analyzed. The first option would apply the COLA modification developed in JLARC's 2008 compensation study to all current active and future VRS members, with the exception of active members who are within five years of full retirement eligibility. This option would not apply to existing retirees. This COLA would increase retirees' payments by 100 percent of the first two percent in the Consumer Price Index (CPI), and by half of each percent increase in CPI from two to four percent. Under this option, the maximum adjustment to a retiree's payment would be a three percent increase. PwC's assessment of this COLA option in 2008 was that it would not have a substantially adverse impact on future retirees' income or active employees' ability to retire. In their analysis of this COLA option, Mercer found that it would not significantly impair the State's competitiveness.

Option 4: Delay Eligibility of the COLA for Employees Retiring on a Reduced Benefit

Projected Impact of Option 4		
$430.4 million cumulative 10-year cost reduction		
Recruitment	Retention	Retirement
None	None	Moderate

None Minimal Moderate Substantial

* All impacts are negative

Another option for reducing the cost of the COLA provision of the defined benefit plans would be to reduce the amount of time that it is payable to some retirees. Specifically, under this option, VRS members who choose to retire with a reduced benefit would not become eligible for the COLA in their second year of retirement, as they are now. Instead, reduced benefit retirees would become eligible only when they reach the age at which they would have become eligible for unreduced retirement benefits. Employees who are forced to take a reduced retirement benefit as a result of budget reductions could be exempted from this option.

In addition to cost savings, this option could result in retaining more experienced employees in the State and local workforce because it would create a disincentive for retiring early. In FY 2011, 730 of the retirees from the State employees' plan retired with a reduced benefit. This represents 26 percent of retirees for that fiscal year. Since 2008, the average percent of retirees per year retiring with a reduced benefit has ranged from 20 to 26 percent. The average age of these retirees is 61, meaning that, on average, retirees under this provision would have to wait approximately four years (Plan 1) or six years (Plan 2) until they reach the age for normal retirement. For the teachers' plan, reduced benefit retirees also take a reduced benefit at an average age of 61, and more than one-third of the teacher plan retirees have taken a reduced benefit since 2008.

Impacts of COLA Changes Would Be Similar Across Both Options

Both of these COLA options would possibly result in future retirees receiving lower or fewer cost-of-living adjustments during retirement. Therefore, the impact of these options on the State and local governments' recruitment and retention goals and on employees' ability to retire at an appropriate time and with adequate income would be similar.

Impact on Retirement Goals. Of the two COLA options, the first (Option 3) would be the least likely to significantly impact employees' retirement goals. In the 2008 study, JLARC analyzed the impact that Option 3 would have had on a retiree's monthly benefit had it been in place. Ten years after retiring, this COLA would have resulted in a benefit approximately six percent below the current Plan 1 approach. According to PwC, this COLA would still be "very helpful in enabling employees to retire at the right time with adequate income for life." Retirees would be eligible to receive an additional COLA on their future Social Security retirement benefits.

COLA Option 4 would have the greatest impact on employees' ability to retire because it would eliminate the benefit for those retiring prior to the age at which they can retire with unreduced benefits.

Impact on Recruitment and Retention Goals. Mercer's analysis of these options indicates that they would have little impact on recruitment, particularly for newly hired employees. While mid-career recruits and longer-service employees would be more likely to value the COLA, any COLA which provides protection against future inflation that is a component of the retirement package would likely be viewed as an asset. In fact, the very presence of the COLA contributes highly to the defined benefit plans' competitiveness, according to Mercer.

Option 4 is likely to result in some employees who would have taken a reduced retirement benefit deferring their retirement until later years. This option could therefore contribute to State and local governments' retention goals.

Impact on Future Costs. The VRS actuary analyzed the impact of Option 3 on contribution rates through FY 2022. By the year 2022, contribution rates would be approximately 0.24 percentage points lower for the State employees' plan and 0.39 percentage points lower for the teachers' plan. Cumulatively over the ten years the change would result in $369.3 million less in contributions being required for the State employees', SPORS, VaLORS, JRS, and teachers' plans.

The VRS actuary analyzed the impact of Option 4 on contribution rates through FY 2022. By the year 2022, contribution rates would be approximately 0.39 percentage points lower for the State employees' plan and 0.45 percentage points lower for the teachers' plan. Cumulatively over the ten years the change would result in $430.4 million less in contributions being required for the State employees', SPORS, VaLORS, JRS, and teachers' plans. As stated above, consideration should be given to applying any changes to political subdivision plans as well, which would result in cost savings for local governments for either Option 3 or Option 4.

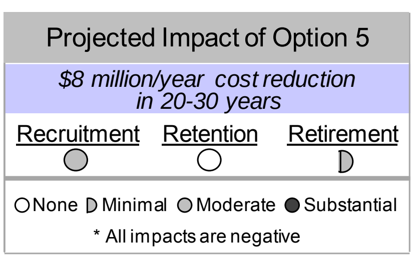
OPTION FOR INCREASING THE TIME THAT SOME EMPLOYEES MUST WORK IN ORDER TO RECEIVE UNREDUCED RETIREMENT BENEFITS

Options were not developed for modifying the age and years of service requirements for general employees. Most Plan 2 employees must already work longer to achieve the same level of benefits as Plan 1 employees. Moreover, according to researchers at the Center for Retirement Research at Boston College, the age and years of service requirements for VRS benefits are already realistic and consistent with the notion that employees should be expected to work longer. Additionally, modifying the age and service requirements for Plan 1 employees would not likely meet the legal tests summarized later in this chapter.

The Plan 2 changes that require newly hired employees to meet greater age and service requirements for full unreduced VRS benefits did not apply to members of the State Police Retirement System (SPORS) and the Virginia Law Officers' Retirement System (VaLORS). These members remain eligible to retire with full unreduced VRS benefits once they reach a minimum age of 50 and have accrued at least 25 years of service. The purpose of these earlier retirement eligibility provisions is to acknowledge the benefit to the public and to the employees in these hazardous duty job roles of allowing them to retire earlier.

An analysis of VRS data shows, however, that members of these hazardous duty plans tend to work past their eligibility date for unreduced retirement. In the 2011 actuarial valuation of the State plans, the VRS actuary calculated that employees in the SPORS and VaLORS plans worked until an average age of 57 and 58, respectively, before retiring from the State.

Option 5: Increase Age at Which Hazardous Duty Employees Become Eligible for Unreduced Retirement Benefits



Given their tendency to work seven to eight years after the age requirements of their plans, this option was developed that would require newly hired SPORS and VaLORS members to work until age 55 to receive full unreduced VRS benefits. However, consistent with the notion that employees in these job roles should be able to retire after a shorter career with the State than non-hazardous duty employees, this option would still allow full retirement at 25 years of service. As stated above, consideration should be given to applying any changes to the local hazardous duty plans offered by political subdivisions as well.

Impact on Recruitment, Retention, and Retirement Goals. Because this option would conform the existing provisions of the SPORS and VaLORS plans to the retirement patterns of most members of those plans, this change would be unlikely to have substantial impacts on the State's recruitment and retention goals or on these employees' ability to retire at an appropriate time with adequate income. In fact, if this option were to increase the time the members of these plans work, their benefits in retirement would be greater, although likely paid out over a shorter timeframe.

Impact on Future Costs. According to analysis performed by the VRS actuary, the impact of this change on the future contribution rates requested from the State would range from a decrease of 0.51 percentage points for the SPORS plan to 1.44 percentage points for the VaLORS plan. Because this change would apply to newly hired employees, the contribution rate reductions would not be realized in the short term. The VRS actuary estimates that once all SPORS and VaLORS members are covered by this provision (20 to 30 years), the change could result in approximately $8 million in cost reductions. Consideration should be given to applying any changes to the local hazardous duty plans offered by political subdivisions as well, which would result in cost savings for local governments.

OPTIONS FOR SHIFTING A GREATER PORTION OF RETIREMENT PLAN COSTS TO ACTIVE VRS MEMBERS

In addition to plan design, a key factor that determines the cost of the retirement plans to the State and local governments is the cost-sharing arrangement between the State and local governments and their employees. JLARC staff were asked to evaluate what portion of retirement program costs should be funded by the employer and what portion should be funded by the employee.

The division of cost-sharing for public pensions is a policy area that has received much attention across the country, including Virginia. According to the Pew Center on the States, between 2001 and 2010, 24 states enacted legislation that increased the amount public employees pay to the cost of their pensions. According to the National Conference of State Legislatures, 25 states, including Virginia, increased employee contributions in 2010 and 2011 alone.

In setting up the funding approach for the retirement benefits, the General Assembly anticipated that the costs would be shared by plan members and their employers. In sections 51.1-144-145, the *Code of Virginia* requires that the costs of the retirement benefits be partially funded by employer and employee contributions into the trust funds.

In 1983, the General Assembly altered the cost-sharing arrangement between members of the plans for State employees and the State by choosing to pay the member contribution on behalf of employees in lieu of a salary increase. Since that time, State employees have not been required to contribute to the cost of their defined benefit plans. Most localities, including school divisions, also chose to pay the member contribution on behalf of their employees. JLARC staff found in 2008 that Virginia was one of four states that did not require employees to pay toward the costs of their benefits. PwC concluded that this aspect of the benefit structure was rare and "significantly increases the value and cost of the VRS benefit."

The General Assembly has since determined that the cost of the defined benefit plans should be borne by both the employer and the employee. The 2010 and 2011 General Assembly sessions resulted in all State employees who are VRS members having to pay toward the cost of their retirement benefits. Local governments and school divisions were given the option of requiring their Plan 2 employees to pay the five percent member contribution. As summarized earlier in this chapter, only a minority have chosen to change their cost-sharing structure accordingly.

Option 6a: Increase Member Contribution Rates to Seven Percent of Salary

Projected Impact of Option 6a		
$232.4 million cost reduction in FY 2016		
Recruitment	Retention	Retirement
●	●	◗

○ None ◗ Minimal ◐ Moderate ● Substantial

* All impacts are negative

The impact of increasing the member contribution for State employees and teachers by an additional two percent was analyzed for this study. This would result in a total member contribution of seven percent of salary. For employees hired prior to the effective date, the State could consider phasing in this contribution increase in 0.5 percent increments each year over a four-year period. As such, the full cost reduction of $232.4 million would not be realized until FY 2016. For employees hired after the effective date of the change, the rate would automatically increase to seven percent. This option would be consistent with Mercer's recommendation that, if there is a desire to increase member contributions, the contribution be set at no more than a total of seven percent of salary in order to remain competitive with nearby states.

In the 2008 study, JLARC and PwC analyzed the potential impact of increasing the member contribution from five percent to seven percent. Under this option, the State would have continued to subsidize the five percent member portion and employees would contribute an additional two percent. This increase would have been phased in during periods of salary increases.

Option 6b: Increase Member Contribution Rates to Nine Percent of Salary for Hazardous Duty Employees

Projected Impact of Option 6b		
$21.7 million cost reduction in FY 2016		
Recruitment	Retention	Retirement
●	●	◗

○ None ◗ Minimal ◐ Moderate ● Substantial

* All impacts are negative

For members of the VRS retirement plans whose benefits are greater, and thus more costly, than the State employees' and teachers' plans, the State could consider requiring greater contributions commensurate with the higher cost of their benefits. While

Virginia has historically not required higher member contributions for hazardous duty employee with enhanced retirement benefits, this is a practice in several other states, including Alabama, Illinois, Iowa, Kentucky, New Jersey, and South Carolina.

Under this option, the State could also consider increasing the contributions required of the SPORS and VaLORS members to nine percent of pay. Again, for employees hired prior to the effective date, this increase would be phased in in 1.0 percent increments each year over four years, and would be effective immediately for newly-hired employees. As such, the full cost reduction of $21.7 million would not be realized until FY 2016.

General Assembly May Wish to Consider Requiring Employees to Share Costs of Future Benefit Modifications

According to researchers interviewed by JLARC staff at the Boston College Center for Retirement Research, as well as recent studies on well-funded pension plans, the costs associated with retirement benefit increases should be at least partially borne by the employees who are eligible for those greater benefits. The costs of the benefit increases that have occurred over time for the SPORS and VaLORS plans have been exclusively paid for by the State. These benefit increases were not provided to general employees. Requiring higher contributions from members of these plans than members of the plans for general employees would help ensure that these members are paying somewhat more for their greater level of benefits.

At a minimum, the General Assembly may wish to ensure that the added costs of any future plan changes be shared by employees whose benefits are affected by the plan changes. This could reduce the likelihood that benefit increases will be sought or enacted when State and local resources are more plentiful.

Recommendation (3). The General Assembly may wish to amend the *Code of Virginia* to require that the costs incurred by the State and local governments directly because of modifications to provisions of the defined benefit plans for any employees be shared by the employee and the employer.

Projected Impact of Option 7

$393.4 million cost reduction in FY 2015

Recruitment	Retention	Retirement
●	●	◗

○ None ◗ Minimal ◎ Moderate ● Substantial

* All impacts are negative

Option 7: Implement a Variable Member Contribution Rate Structure That Results in Employees Assuming Greater Financial Risk Than the State

One of the disadvantages of a defined benefit plan's cost-sharing structure is the unpredictability of the plans' costs for the State and local governments. As described in Chapter 4, the cost fluctuates based on various factors over which the plan sponsor typically has limited control. Over the past ten years, the contribution rate required by the State to cover the costs of the State employees' retirement benefits has experienced a steady decrease (2000-2006) followed by an abrupt increase (2007-2011). This is partially due to the economic recession/recovery/recession cycle experienced over this time period. Because of the impact of investment earnings on contribution requirements, volatility in investment earnings can result in relatively abrupt increases in the annual required contribution from the employer, even with the use of actuarial smoothing.

One approach to stabilizing the employer contribution rate, thus making it easier to budget for from year to year, would be to set it at a constant rate. Under this approach, plan costs above the employer's flat rate would be the responsibility of plan members. This model shifts the risk of increasing plan costs completely from the employer to the plan member. A similar structure was implemented in Utah in 2010. However, Utah implemented this structure for a new plan tier that had no existing unfunded liabilities. As a result, according to a representative from Utah's retirement system, it is unlikely that plan members will need to make any contributions, unless the costs of the new plan experience a dramatic increase.

Such an approach could be considered in Virginia. However, if implemented while the plans are at their current funded ratios, this option would likely make the benefits unaffordable for some employees and reduce the competitiveness and attractiveness of the defined benefit plan and the State's total compensation. Depending on the employer's rate, plan members could immediately see their contribution rates increase significantly and they would likely bear a greater portion of the plans' costs than the State. Additionally, instead of only paying for the cost of their future unearned benefits, they would also be paying toward a portion of the unfunded liabilities that have, at least in part, been created as a result of lower than necessary employer contributions into the plans.

One way to mitigate the impact on employees of this approach would be to impose a cap on the portion of the plans' cost that is borne by members. The State's contribution rate could be set at five percent, employees would pay the portion of the cost between five and 12 percent, and then have the employer and the employee share any costs above 12 percent of payroll equally. Employees' contributions would be subject to an employee cap of 8.5 percent of salary. According to cost projections for the State employee plans, this would result in members immediately paying 8.5 percent of salary to the cost of their benefits and continuing at this level for the foreseeable future. This would result in the State's obligation being reduced by 3.5 percent of payroll, which is the amount by which the employee contribution would increase over the current level of five percent. (If the member contributions are only used to pay for the normal costs of the plans and not the unfunded accrued liability, then the member contribution increases less sharply, but still reaches eight percent almost immediately.)

Impacts of Contribution Rate Increases Would Be Similar Across All Options

These cost-sharing options would result in existing employees and future new hires contributing a greater portion of their salary to the cost of their retirement benefits. Therefore, the impact of these options on recruitment, retention, and retirement are similar. Higher contributions would also mean that employees would own a greater portion of the total contributions into the VRS trust funds, and could potentially withdraw these contributions plus four percent interest if they ever chose to leave State employment.

Impact on Recruitment and Retention Goals. As with the other options, modifying the cost-sharing arrangement for the defined benefit program does not alter the guaranteed nature of the benefit. Because this future guarantee is the most valued aspect of the defined benefit plans, increasing employees' costs may not have a long-term significant impact on recruitment as long as these costs are affordable and commensurate with the State's competitors. However, employee contribution increases could have a negative impact on recruitment in the short term because the former noncontributory nature of the plan was the second most attractive aspect to new employees. Additionally, because contribution increases would result in a reduction in net take-home pay for employees, this change would reduce the value of the State's total compensation package and employees' cash compensation. As discussed in Chapter 2, cash compensation for State employees is already well below what Mercer considers to be competitive.

Because contribution increases would result in a reduction in net take-home pay for employees, this change would reduce the value of the State's total compensation package and employees' cash compensation.

If VRS members are required to make additional contributions to the costs of their retirement benefits and do not receive commensurate salary increases, then the State will be less competitive as an employer. As discussed in Chapter 2, Mercer found that the State currently ranks last behind 15 competitors in terms of compensation, and this ranking is largely due to the State's relatively low salaries. Further, Mercer's analysis shows that had the State not provided Plan 1 employees with a five percent salary increase to offset the requirement that they contribute five percent of their salary to retirement plan costs, the State's total compensation package would be nine percentage points below the market median, or barely competitive.

Now that employees must contribute toward their retirement benefit costs, maintaining a competitive plan depends in part on how this cost compares to what employees of the State's competitors pay toward the cost of their retirement benefits. According to researchers interviewed at the Boston College Center for Retirement Research, a five percent member contribution is typical for public defined benefit plans. Mercer observed that the State could consider increasing the member contribution, but recommended that this be set at no more than seven percent of salary in order to remain competitive with nearby states.

Based on JLARC staff's survey of State agency human resource managers, increases in the employee contribution requirement could challenge agencies' ability to recruit new employees, particularly those agencies that are already experiencing recruitment difficulties. Sixty-one percent of the human resource managers responding to the survey indicated that increasing the member contribution requirements would have the greatest negative impact on their agencies' ability to recruit new employees, compared to other potential plan modifications. Among all of the potential changes to the defined benefit programs, this was the most frequently cited by survey respondents as likely to have a negative impact on recruitment.

Sixty-one percent of the human resource managers responding to the survey indicated that increasing the member contribution requirements would have the greatest negative impact on their agencies' ability to recruit new employees.

Mercer observed that increasing the member contribution by more than an additional two percent would result in the Commonwealth requiring higher contributions than all of its neighboring states. Further, with respect to Option 7, Mercer stated that the "volatility of required employee contributions [would be] a concern for future employees." Option 7 would likely have the greatest impact on the State's recruitment and retention goals. This option would result in unpredictable contribution rates required by employees, employees potentially bearing more of the cost for their benefit than the State, and (if implemented before the plans' unfunded liabilities are erased) employees paying for a portion of the plans' existing unfunded liabilities.

Increasing employee contributions could result in increased turnover due to a negative impact on job satisfaction. Mercer's assessment of these options is that they would negatively impact the State's ability to retain existing employees. This is particularly true of Option 7, because of the potential volatility in employee contributions. A further increase in the member contribution requirement, particularly if it is not coupled with a commensurate salary increase or with an increase in the generosity of the defined benefit provisions, would be viewed by existing employees as a benefit reduction and as a reduction in pay. Phasing the increased contribution in as described in Option 6 could alleviate some retention concerns, yet employee morale could be affected each year with each new increase, no matter how small. For example, one human resource manager stated:

> State employees…are concerned that more changes are coming that will mean more money out of their pocket. This has been a main factor that several employees have given me for their leaving employment over the past year.

Additionally, many employees will likely view this step as penalizing employees who played no role in creating the existing unfunded liabilities that the additional contribution would at least be partially paying for.

Requiring employees to pay for a portion of the costs of their retirement benefits is reasonable, and many employees agree. Based on responses to the survey of State employees, employees would question the reasonableness of required contributions that exceed the current five percent level. Of those State employees who responded to JLARC's 2011 survey, approximately half agreed that the current member contribution of five percent of salary is appropriate. However, 39 percent disagreed and, of those, more than half said that they "strongly disagreed" that the current requirement was appropriate. Of those who disagreed that the existing contribution rate was appropriate, two-thirds responded that they should not have to contribute anything toward their retirement plan, while a smaller percentage felt that some contribution would be appropriate, albeit less than the current level. Further, only 20 percent of State employees reported that they would be willing to pay a greater amount in order to keep their current level of retirement benefits. Of those, a greater proportion were in higher salary brackets ($75,000 or more).

Some observers have noted that increasing the required VRS member contribution would be similar to increasing employees' share of the premiums employees pay for their State-sponsored health insurance program. These premiums have increased over time. An important difference between these two programs, however, is that State employees are given the option to participate in one of the State's health plans or to opt out of health insurance coverage. This option is not afforded to employees with respect to the retirement plan, participation in which is mandatory. Employees whose health insurance premiums increase due to growing costs could presumably cease their enrollment in health coverage in favor of, for example, a spouse's plan. In contrast, the employee would not have this choice with respect to participation in the retirement plan.

Higher contributions do not result in greater VRS benefits and at the same time reduce employees' ability to save for their retirement in other ways.

Impact on Retirement Goals. Higher contributions do not result in greater VRS benefits and at the same time reduce employees' ability to save for their retirement in other ways. As discussed in Chapter 3, most employees will be unable to achieve recommended income replacement targets if they rely on the VRS benefit alone.

Impact on Future Costs. In general, for every one percent increase in member contributions, the plans' costs would be reduced by nearly an equivalent amount. This option would not result in a one-for-one decrease in the State's costs because a greater portion of the retirement plan contributions would be subject to member refunds if the employee separates from State employment.

Option 7 would result in the greatest and most immediate cost savings to the State ($393.4 million in 2015) because it would immediately cap the State's contribution requirement at five percent of payroll, which, for the State employees' plan, is eight percentage points lower than what the required contribution would otherwise be for fiscal year 2013. However, if this option were implemented to reduce the volatility in the employee's portion of the cost, then the State would share the cost of the plan with the employee for any cost over 12 percent of payroll, subject to an employee cap of 8.5 percent. This would result in employees immediately paying the 8.5 percent maximum rate in fiscal year 2013, bringing down the State's costs by 3.5 percentage points. Given that contribution rates for the State employees' and teachers' plans are expected to further increase and remain at levels higher than those recommended in the 2011 valuation, employees would be subject to this 8.5 percent contribution rate for at least the next ten years.

As stated above, consideration should be given to applying any changes to political subdivision plans as well, which would result in cost savings for local governments. However, with respect to increases in member contributions, because political subdivisions and school divisions have not been permitted to require their Plan 1 employees to pay the existing member contribution, the *Code of Virginia* would need to be amended or language would need to be included in the Appropriations Act to permit this change for these local employers.

Table 10 summarizes the projected impacts of each of the options presented in this chapter, including the cost-sharing modifications just discussed.

SEVERAL IMPORTANT ISSUES SHOULD BE CONSIDERED IF DEFINED BENEFIT PLAN MODIFICATIONS ARE SOUGHT

The options discussed above are not a comprehensive list of potential changes that could be considered for the State's retirement plans, but are reasonable changes that would reduce the State's future benefit obligations for employees and place greater

Table 10: Summary of Defined Benefit Modification Options

Option	Plans	Employees	Negative Impact on Benefit as Recruitment Tool	Negative Impact on Benefit as Retention Tool	Negative Impact on Employees' Ability to Retire	Reduction in Plan Costs[a] ($ millions)
1. Calculate AFC over 60 months	All	Employees hired before 7-1-2010 (Plan 1)	○	◗	◗	$509.5
2. Reduce benefit multiplier to 1.6% of AFC	State employees, teachers, local gov't. non-hazardous duty	Newly hired	◍	○	◗	$165.5
3. Cap COLA at 3% of increase in CPI	All	Existing and newly hired	○	◍	◗	$369.3
4. Delay COLA for reduced benefit retirees	All	Existing and newly hired	○	○	◍	$430.4
5. Increase eligibility for full benefits to age 55	All hazardous duty	Newly hired	◍	○	◗	$8
6a. Increase member contributions to 7 percent of salary	State employees, teachers, local gov't. non-hazardous duty	Existing and newly hired	●	●	◗	$232.4
6b. Increase member contributions to 9 percent of salary (Implemented with 6a.)	All hazardous duty and judges	Existing and newly hired	●	●	◗	$21.7
7. Employee variable contribution rate	All	Existing and newly hired	●	●	◗	$393.4

Key: ○ No impact ◗ Minimal impact ◍ Moderate impact ● Substantial impact

Note: Impact of 1.6 percent multiplier could be substantial for lower salaried or shorter tenured employees. Impact of higher required member contributions on recruitment could be lower if an offsetting salary increase were provided. Impact of higher required member contributions on retention could be lowered if phased in over time for existing employees and if an offsetting salary increase were provided.

[a] Effect on plan costs is cumulative through FY 2022 for all applicable plans except for options 5, 6, and 7 which show the expected savings once all members are under these provisions (20-30 years for Option 5, four years for Option 6, and three years for Option 7). Cost reductions are not shown as present-day values and assume three percent annual inflation. Cost reductions are inclusive of both general and non-general funds.

Source: JLARC staff, Mercer, and Cavanaugh Macdonald analysis.

responsibility on employees for accumulating sufficient resources for retirement.

The preceding discussion summarized the potential impact of each individual option on the retirement plans' objectives of recruiting and retaining employees and providing a benefit that allows employees to retire at an appropriate time and with adequate income. If the General Assembly wishes to pursue these or other options, several important factors should be considered.

State and Local Governments View Defined Benefit Provisions as Important to Workforce Management, and Changes Should Be Minimal to Preserve Effectiveness

Based on responses to the surveys conducted of human resource managers and State employees, as well as structured interviews with employees and State agency human resource managers, it appears that further modifications to the defined benefit plans could diminish the ability of some agencies to recruit qualified employees. Additionally, modifications that would affect the future benefits or cost-sharing structure for existing employees could impair retention, particularly if employees no longer view the new retirement structure as sufficient to offset their relatively lower salaries. However, these impacts could lessen over time as the new benefit structure becomes the norm.

Many human resource managers interviewed and surveyed by JLARC staff reported that despite the lower cash compensation, agencies have typically been able to recruit qualified employees because of the total benefits package, which includes competitive health insurance and defined benefit retirement packages. The importance of the benefits to agencies' recruitment objectives has reportedly grown due to the continuing freeze on State employees' salaries. Managers expressed concerns that benefit reductions, in the absence of addressing the State's uncompetitive salaries, would negatively impact recruitment of a qualified workforce. Without qualified and experienced individuals in key positions, some of the managers observed that the quality of the agencies' services that are delivered to the public could be diminished.

As stated in Chapter 2, JLARC staff found that the defined benefit retirement plans help to retain State and local government employees. This is particularly true of longer-tenured employees who value the promise of future retirement income more highly than new employees. Because the amount and value of the defined benefit increases the longer an employee works, the very nature of the defined benefit structure itself will likely continue to be an effective retention tool, despite modifications. The most frequently cited reason that employees identified the retirement plan as a chief factor in their decision to remain employed with the State is the fact that they will rely on the VRS benefit as their primary source of income in retirement (59 percent of those respondents).

While maintaining a defined benefit plan will be beneficial to the State and local governments with respect to retention goals, further modifications to existing benefits could result in some increased turnover in the near future. In interviews with JLARC staff, some local government employees and State agency human resource managers predicted that some employees may leave State or local government employment if further modifications are made to existing employees' retirement benefits. Human resource managers expressed concern about agencies' ability to replace knowledgeable employees who either decide to seek other employment opportunities or who accelerate their retirement plans in order to avoid negative impacts on their future retirement income.

Several Factors Should Be Considered Before Shifting Greater Share of Benefit Costs and Risks to VRS Members

JLARC staff were unable to identify specific actuarial principles upon which to base a defined benefit plan's cost sharing arrangement. Researchers at the Center for Retirement Research at Boston College confirmed in an interview with JLARC staff that their research has also not identified any best practices or principles.

In the absence of any clear principles, JLARC staff developed four key guidelines that the State may wish to follow in order to ensure that any revisions to the existing cost-sharing arrangement are reasonable and do not substantially diminish the effectiveness of the defined benefit plan. Specifically, to maintain the effectiveness and affordability of the benefit, the State may wish to ensure that the cost-sharing arrangement

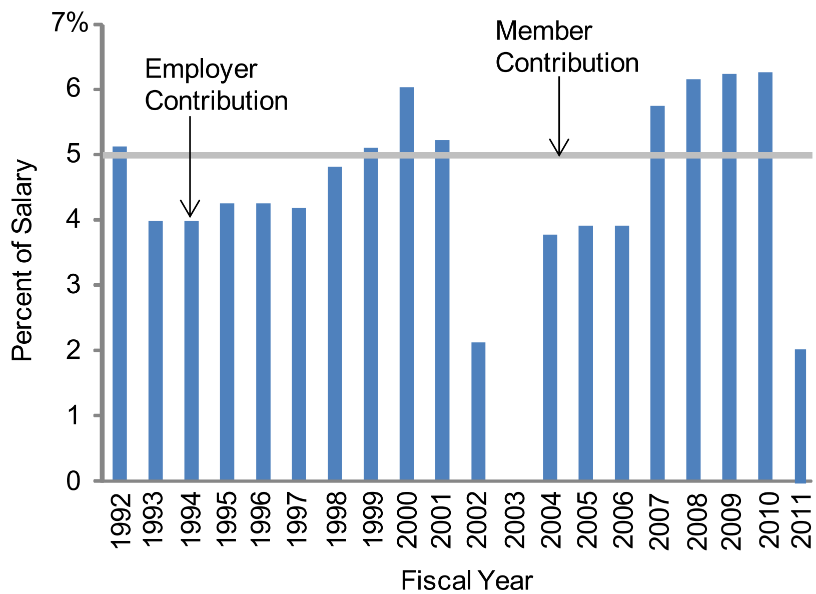
- provides a competitive cost-sharing arrangement compared to the Commonwealth's peer employers,
- requires an employer contribution that results in employees continuing to view the retirement plans as an employer-sponsored benefit that is a key component of their total compensation,
- is affordable for employees, and
- results in lower and more predictable costs for the employer.

Another factor that could be considered is the difference in value of an employee contribution compared to the same contribution from the employer. Some retirement plan experts assert that the employee's contribution is less valuable to the plan because these funds are owned by the employee and thus subject to a refund to the employee if he or she separates from the plan. The employer's contribution, however, remains in the plan if that employee separates from service.

If Cost-Sharing Changes Are Made, Employees Should Understand How Their Contributions Are Used. One important consideration in increasing the required member contribution is the extent to which this erodes employees' perception that they have a true employer-sponsored benefit. For the State employee plan, the fixed five percent member contribution has exceeded the employer contribution rate paid by the State 11 times in the past 19 years (Figure 11).

If additional employee contributions are sought, there should be transparency regarding the costs employees are paying and for what their contributions are being used. For example, if greater employee contributions are requested while the retirement plans have outstanding unfunded liabilities—as is currently the case—then employees should be made aware that a portion of their contribution will likely be applied to these liabilities.

Figure 11: Member Contribution Has Often Exceeded Employer Contribution to State Employee Retirement Plan Costs



Note: During the time period presented in the chart, the State and local employers paid the five percent member contribution on most employees' behalf. No contributions were made in 2003.

Source: JLARC staff analysis of VRS data.

Cost-Sharing Changes Should Not Result in Employees Being Unable to Afford Their Retirement Plan. The 2008 JLARC compensation study concluded that the salaries of some State employees are not sufficient to cover basic living expenses. JLARC staff compared salary data for classified employees in 2007 and found that nearly 1,500 earned less than the self-sufficiency standard for single adults in their localities. According to the report, "ninety percent of these employees were either Direct Service Associates, Housekeeping and/or Apparel Workers, Food Service Technicians, or Administrative and Office Specialists." For employees in these and other lower salaried job roles, an additional contribution to their retirement plan is unlikely to be affordable. Several human resource managers interviewed and surveyed by JLARC staff for this study described many employees who live paycheck to paycheck and would be unable to afford even a modest decrease in their take-home pay without undergoing economic hardship.

Self-Sufficiency Standard

The self-sufficiency standard represents the amount of money working adults need to meet their basic needs without subsidies of any kind. The standard covers only immediate, day-to-day necessities. For a single adult, the standard ranges from $14,347 per year in Scott County to $32,572 in Manassas Park City (2006 standard inflated to 2010 dollars).

Some states have addressed concerns about the affordability of member contributions by exempting a certain portion of employees' salaries from the member contribution. For example, in Delaware, employee contributions to the pension fund will increase from three percent to five percent effective January 1, 2012, but only after the first $6,000 in salary. In New Mexico, employees with salaries below $20,000 were not subject to recent employee contribution increases. Virginia addressed this concern in 2011 by offsetting the newly required employee contribution of five percent by an equivalent salary increase. Because of increased out-of-pocket costs for FICA taxes, most employees' net pay was actually reduced. JLARC staff requested data from the Department of Accounts (DOA) on the average amount by which State employee Plan 1 members' net pay was reduced, but this data was not available. However, DOA did provide examples of net pay decreases by salary ranges (Table 11).

Table 11: Examples of Reductions in Employees' Take-Home Pay as a Result of Five Percent Salary Increase in 2011

	Illustrative State Employee Salaries				
	$20,000	**$30,000**	**$45,000**	**$70,000**	**$100,000**
Percent Decrease	-0.7 percent				
Decrease in Dollars (Annual)	-$119	-$178	-$262	-$407	-$556

Source: Data provided by the Department of Accounts.

JLARC staff analysis also shows that higher employee contributions, even though they are deducted before taxes, are likely to reduce the employee's take-home pay by an amount greater than the actual contribution. This is because FICA taxes are based on gross salary and not taxable income. An employee with a salary of $40,000 would actually experience a net reduction in take-home pay of about 2.35 percent as a result of an additional two percent pre-tax contribution toward retirement benefit costs.

Mercer observed that a member contribution increase could be appropriate and cost effective if it is not paired with an equal size pay increase for *all* employees. Mercer notes that there is reason to be concerned about a reduction in the net income of the State's lower-salaried employees, and therefore suggested, "If there is concern about ensuring the plan is affordable, [the State] might consider increasing everyone's contribution while only increasing the pay of people at lowest pay levels who may not be able to afford the rise in contribution requirements." Mercer's research indicates that "the mean contribution [that] employees earning less than $25,000 are willing to make is 5.5 percent of earnings."

Having a flat contribution rate across all salary levels, with at least a partial offset through a salary increase for individuals earning $25,000 or less could address affordability concerns. Still, for employees in single-income households making more than $25,000, a decrease in net income could also cause hardship. Therefore, the State may wish to provide a salary increase to offset the potential hardship caused by greater retirement plan contributions for individuals making less than the average salary of the members of the State employees' plan of $48,000. Without an offsetting salary increase for all employees, however, the State's competitiveness could be jeopardized in terms of both cash compensation and total compensation.

Modifications to the Defined Benefit Plans Could Affect Employees' Income in Retirement

As stated in Chapter 3, while there is variation in the recommended amount of an employee's salary that should be replaced by his or her employer-sponsored retirement program, Social Security, and other sources, for this study Mercer recommended a minimum of 79 percent. For lower salaries ($20,000 to $40,000), the recommended range is 99 percent to 88 percent, respectively.

For VRS members who expect to retire solely on their VRS retirement income prior to drawing Social Security benefits, their income is likely to fall well below this range. Even after a career of 30 years, the amount of income replaced by the VRS benefit (51 percent) would be about 15 percentage points below the lowest range identified in the literature by researchers and 28 percentage points below Mercer's lowest recommended amount. Most VRS members who retire do so with fewer than 30 years of service and prior to qualifying for a Social Security benefit.

This chapter discusses modifications to the defined benefit plans that would directly affect future retirees' income replacement. Any benefit reductions that affect income replacement would have to be weighed against the potential disadvantages of an older future workforce. The 2008 JLARC report on State employee compensation notes that "the State would have to consider how this further 'aging' of an already 'aging' workforce would impact other benefit costs (especially health insurance) and whether it is consistent with the overall purpose of offering a retirement plan to its employees."

Modifications to the Defined Benefit Plans Could Result in Employees Needing to Work Longer, Which May Not Be Reasonable for All Employees

Under the options presented in this chapter, employees would need to work longer in order to achieve the same level of retirement benefit that they would if plan modifications were not made. Working longer may slightly reduce plan costs because the length of time over which benefits will be paid in retirement will be shortened.

Many employees could work longer in order to maximize their future retirement income. Retirement planning experts predict that employees will gradually work increasingly longer periods before retiring. Researchers at the Boston College Center for Retirement Research have concluded that most people will be healthy enough to continue working until at least the age of 66. According to State employee survey respondents, 71 percent predicted that they will continue working in some capacity even after they become eligible for retirement. These employees predict that they will either not retire when eligible, or will retire but seek other employment.

Expecting lengthier service may not be reasonable for some categories of employees. This is most likely true for employees with more physically demanding jobs whose effectiveness declines at older ages. For example, implementing a retirement benefit structure that results in some categories of public safety employees working into older ages could impair their ability to respond effectively to emergencies, which is potentially detrimental to the well-being of the public. Many categories of employment that are physically demanding are direct service occupations, such as direct care providers for the mentally ill or the elderly. If employees in these positions had to work into later ages in order to achieve an adequate retirement income, the quality of the services received by those they care for could decline.

Modifications to the Defined Benefit Plans Could Face Legal Challenges

One of the main goals of making changes to the defined benefit plan is to reduce costs to the State, but in making these changes the Commonwealth does risk litigation. While litigation is possible under any scenario, the likelihood that the Commonwealth would prevail depends on the type of change that is made and the group of employees to which the change applies. In general, legal experts state that changing retirement benefits that have already been earned are the most susceptible to successful legal challenge. However, these are the types of changes that are likely to result in the most immediate cost savings to the State. Changing benefits that have not yet been earned by current employees, such as cost-of-living adjustments (COLAs), carries less legal risk, but these changes would likely have a less immediate cost impact. Changes that apply to newly hired employees carry little, if any, legal risk. However, these types of changes would likely have the lowest immediate cost savings for the State. Table 12 summarizes the spectrum of the types of changes that could be considered, the magnitude of their legal risk to the employer, and the magnitude of their cost reductions. Guidance from VRS supports this risk hierarchy. VRS states that

> As a general rule, prospective changes that grandfather benefits earned prior to the date of the change should be acceptable by Courts, if challenged…Little guidance exists to provide clear answers on what would be acceptable changes to retirement benefits based on service and compensation prior to the effective date of the change.

Table 12: Changes That Result in Higher Immediate Cost Savings Also Have More Legal Risk[a]

Type of Change	Magnitude of Short-term Cost Savings	Potential Legal Risk
Changes to retirement benefits that have already been earned by current employees (e.g., retrospective changes to the benefit multiplier)	High	High
Changes to benefits that have not yet been earned by current employees (e.g., COLAs)	Moderate	Moderate
Changes that apply to newly hired employees	Low	Low

[a] Legal risk is defined by JLARC staff as the likelihood of the Commonwealth not ultimately prevailing if there is a legal challenge to the change. The Commonwealth may be more likely to prevail under a "low" legal risk scenario than a "high" or "moderate" legal risk scenario.

Source: JLARC staff analysis of VRS presentation to House Appropriations Committee (11/18/09) and "Public Pension Plan Reform: The Legal Framework," by Amy B. Monahan, University of Minnesota Law School.

Although legal experts tend to agree that certain changes to retirement benefits carry substantial legal risk, there is limited legal precedent in the states on what changes to retirement benefits are permissible because states are just beginning to make changes to their current retirement plans. However, two recent court cases in Minnesota and Colorado provide some guidance. Both of these states reduced the COLAs provided to existing retirees, and the district courts in both states have upheld the changes. In Minnesota, the courts found that there was no promise (or contract) by the state to provide a COLA based on statutory language, and that even if there was a promise or contract, the change in COLA was justified because the change was reasonable and necessary to serve an important public purpose. In Colorado, the courts based their decision on the absence of clear statutory language, and said that there was no contractual right to the *specific* COLA formula in place at retirement. Both of these cases will likely be appealed to their respective state Supreme Courts, so it is unclear whether these lower court decisions will be upheld.

Based on these cases and guidance from VRS legal counsel, the main factor in determining whether changes to VRS's defined benefit plan are permissible is whether there is language that restricts changes to retirement benefits in the *Constitution of Virginia* or the *Code of Virginia*. While the *Constitution* requires the General Assembly to provide a retirement program to State and local employees, it provides no explicit protection for public pension benefits. There is also no language in the *Code* that prohibits changes to retirement benefits.

Impairment of Contract

A contract is an agreement to which the law attaches an obligation. The obligation of a contract is impaired when the substantive rights of the parties thereunder are changed.

Based on guidance from the VRS legal counsel, guidelines developed by the U.S. Supreme Court could be followed to reduce the likelihood that changes could be challenged in court. The Supreme Court uses a three-pronged test for whether changes to benefits are an unconstitutional impairment to a contract:

1. Is there a contract? Is there an impairment of the contract?
2. Is the impairment substantial?
3. Is the impairment reasonable and necessary and justified by an important public purpose?

Based on the guidance of VRS legal counsel and the views of other legal experts, if the State decides to change the defined benefit plan and it also wants to limit its legal risk, it should make the changes prospective for current employees. For example, if Option 1 were implemented then the benefits accrued to date should be honored. If the State wants to further reduce its risk, it should make changes applicable to newly hired employees only.

Given the lack of Virginia-specific case law on the permissibility of changes to employees' and retirees' benefits, if the General Assembly decides to change retirement benefits that have already been earned by current employees or retirees, it may wish to seek a legal opinion from the Attorney General's Office before making the change.

Chapter **6**

Alternative Plans Could Be Offered, but Demand Is Limited and State Costs Could Increase

In Summary

The defined benefit retirement plans the State provides are competitive and are achieving the goals identified for State and local government plans. While replacing the defined benefit plan has been considered, doing so would likely result in significant cost increases in the short term and workforce management concerns. However, optional alternative plans could be offered to give employees more choice and portability, and to reduce the financial risk borne by the State for offering a guaranteed benefit. Based on JLARC staff research, some employees would participate in an optional alternative plan if offered the choice, but most prefer the current defined benefit plan. Two optional alternative plan designs the General Assembly could consider were evaluated to determine if such plans would be advantageous for the State. According to the VRS actuary, with an optional alternative plan, the State could experience higher costs through at least FY 2022. If an alternative plan is introduced, it should include a comprehensive educational component for employees and provide adequate investment options.

The mandate for this study directs JLARC staff to provide the General Assembly with options for alternative retirement plans, if such options are desirable. Specifically, the mandate asks:

- Does the Virginia Retirement System's current defined benefit plan achieve the goals identified for state and local government plans? If not, how should the current retirement plan be changed and/or should an alternative plan be created?
- If an alternative retirement plan is desirable, what options are available? How would various options affect Virginia's ability to achieve the intended purposes of a retirement plan and its ability to adequately fund the plan over time?

JLARC staff were also directed to provide guidance on which option would best meet the needs of the Commonwealth, its localities, and school divisions.

Based on JLARC staff and Mercer assessments in 2008 and 2011, the current defined benefit plans effectively achieve their purposes of helping the State and local governments recruit and retain qualified staff and allowing employees to retire at an appropriate time and with adequate income. However, some State and local government employees expressed a desire for greater portability of their retirement benefits and greater choice among retirement plan designs. Some human resource managers also reported that greater choice could have a positive impact on their agencies' recruiting efforts. This chapter presents two options for providing employees with an alternative to the traditional defined benefit structure.

DEFINED BENEFIT AND DEFINED CONTRIBUTION PLANS ARE THE MOST COMMON RETIREMENT PLAN DESIGNS

Question two of the study mandate asks JLARC staff to outline the objectives, historical intent, and distinguishing characteristics of defined contribution plans, defined benefit plans, and other retirement plan designs. To date, most employers have offered one of two basic types of retirement plan designs: a defined benefit design or a defined contribution design.

Defined Benefit Retirement Plans Are Designed to Recruit and Retain Employees

As discussed in Chapter 1, defined benefit plans provide employees with a guaranteed lifetime benefit at retirement, which is based on a formula that typically involves the retiree's average final earnings while employed, his or her years of service, and a benefit multiplier. Benefits paid through a defined benefit plan are typically generated from three sources: employee contributions, employer contributions, and investment returns. As the investor, the employer primarily bears the risks and rewards of investment returns. Because the payments are guaranteed in this type of design, the employer bears the financial risk of ensuring that enough assets have accumulated to pay the benefits that have been promised.

Generally, the historical intent of defined benefit plans in the public sector has been to attract a stable, career-oriented workforce—to build the civil service. The way defined benefit programs are typically structured incentivizes employees to work a career (or at least a good portion of it) with an employer or a group of employers. Since 1908, Virginia has offered defined benefit plans to at least a segment of its workforce.

The U.S. Bureau of Labor Statistics estimates that, as of March 2011, 92 percent of all full-time state and local government workers have access to a defined benefit plan.

Among state and local governments in the United States, defined benefit retirement plans are the most common type of retirement plan. The U.S. Bureau of Labor Statistics (BLS) estimates that, as of March 2011, 92 percent of all full-time state and local government workers have access to a defined benefit plan. Of this 92 percent who have access to a defined benefit plan, BLS estimates that 94 percent participate.

Defined Contribution Plans Are Designed to Reduce Liability of Employers and Increase Portability for Employees

In a defined contribution plan, the employer bears no financial risk because the employee is not guaranteed any level of benefit at retirement. Relatively newer and much less prevalent in the public sector than defined benefit plans, defined contribution plans typically involve both employer and employee contributions into an employee-managed retirement savings account. The benefit is determined by how much an employee saves, how much the employer contributes to the employee's account, and how his or her investments perform throughout a career. The employee, therefore, bears the risks and rewards of investment returns. The employee is also responsible for ensuring that their defined contribution savings lasts throughout their retirement.

Once fully vested, employees can usually take a larger share of the value of the defined contribution plans with them to other employers than they can with defined benefit plans. This greater portability is likely to be more appealing to those who do not believe they will work a long tenure with a single employer or a group of employers covered under a single defined benefit plan, such as VRS.

According to a review of literature and interviews with retirement experts, defined contribution plans were originally intended as a supplement to an employer-sponsored defined benefit plan and Social Security benefit in both the private and public sectors. Today, most private sector employees with access to an employer-sponsored retirement plan are only covered under a defined contribution plan and Social Security. Where public sector employees have access to a defined contribution plan, participation is most often voluntary and is supplemental to their employer-sponsored defined benefit plan and Social Security. However, as explained later in this chapter, several states have implemented mandatory or optional defined contribution plans as their primary plan for public employees. Table 13 outlines the distinguishing characteristics of the two plan designs, and includes some differences not discussed in this section.

Combination Plans Are Designed to Share Financial Risk, While Guaranteeing a Retirement Benefit to the Employee

Some states have also chosen to offer plans with both defined benefit and defined contribution components (combination plans). Typically, in these types of plans, the defined benefit element is less generous than a pure defined benefit plan and the defined contribution element is less generous than a pure defined contribution plan. The benefit provided through a combination plan is generally

Table 13: Defined Benefit and Defined Contribution Plans Have Important Distinguishing Features

	Defined Benefit Plans	Defined Contribution Plans
Who bears the investment risks and rewards?	The employer	The employee
How is the benefit amount determined?	A formula, typically based on years of service and average final compensation	Past employee and employer contributions and investment performance
Does the employer guarantee the benefit?	Yes	No
Who contributes to the retirement benefit during employment?	The employer and the employee	The employer and the employee
How are the benefits paid for?	Employee contributions, employer contributions, and investment earnings	Employee contributions, employer contributions (if offered), and investment earnings
How much can employees take with them if they leave covered employment?	Typically, past employee contributions with interest (least portable)	If fully vested, all employee and employer contributions with any investment gains or losses (most portable)
When is the employee eligible to retire?	When the employee has reached age and service requirements	When the employee has vested and believes he or she has accumulated enough money to retire (although withdrawal penalties may be applied if retiring prior to age 55)
To whom does this plan design normally appeal?	Senior management, mid-career hires, long-tenured employees, older employees, lower-salaried employees	Young, mobile employees (short-service employees)
Can the beneficiary outlive his or her retirement benefits?	No	Yes
How does the plan design protect the retiree from inflation?	Cost-of-living adjustments may be applied consistently or periodically by the employer to account for higher prices.	To protect assets from inflation, individual must continue to invest savings or purchase an annuity with cost-of-living adjustment provisions.

Source: JLARC staff review of literature on defined benefit and defined contribution plans.

less portable than a pure defined contribution plan. but is more portable than a pure defined benefit plan. According to researchers at Boston College's Center for Retirement Research, these plans can be an effective strategy to divide the financial risk of employer-sponsored retirement plans between the employee and the employer.

There are at least two possible approaches to structuring a combination plan, only one of which has been implemented to date by states with combination plans. In the first approach, the defined benefit and defined contribution elements are two independent pieces of a single retirement package (a "side-by-side" or "parallel" combination plan). In this structure, all employees are responsible for saving enough in their separate employee-directed investment accounts to replace the pre-retirement income replacement lost through a lower defined benefit plan multiplier than a pure defined benefit plan.

The second structure, originally conceptualized by the Center for Retirement Research, is a "stacked" approach, which guarantees a retirement benefit up to a certain level of earnings. Earnings above this level would be covered by a defined contribution plan. This structure would "maintain the defined benefit plan as a base and provide defined contribution coverage for earnings above some cut-off." The advantage of the "stacked" approach, according to the Center for Retirement Research, "is that it allows employees with modest earnings to receive the full protection of the defined benefit plan. This group would be the most vulnerable if required to rely on a [defined contribution plan] for a portion of their core retirement benefit." No state has implemented a "stacked" approach, but there are at least three states exploring the idea.

THIRTEEN STATES OFFER ALTERNATIVE RETIREMENT PLANS

As previously mentioned, the defined benefit plan remains the predominant plan design among public employers in the United States. According to the Center for Retirement Research, 37 states (including Virginia) currently offer traditional defined benefit plans as their only primary retirement plan design for general state employees.

Cash Balance Plan

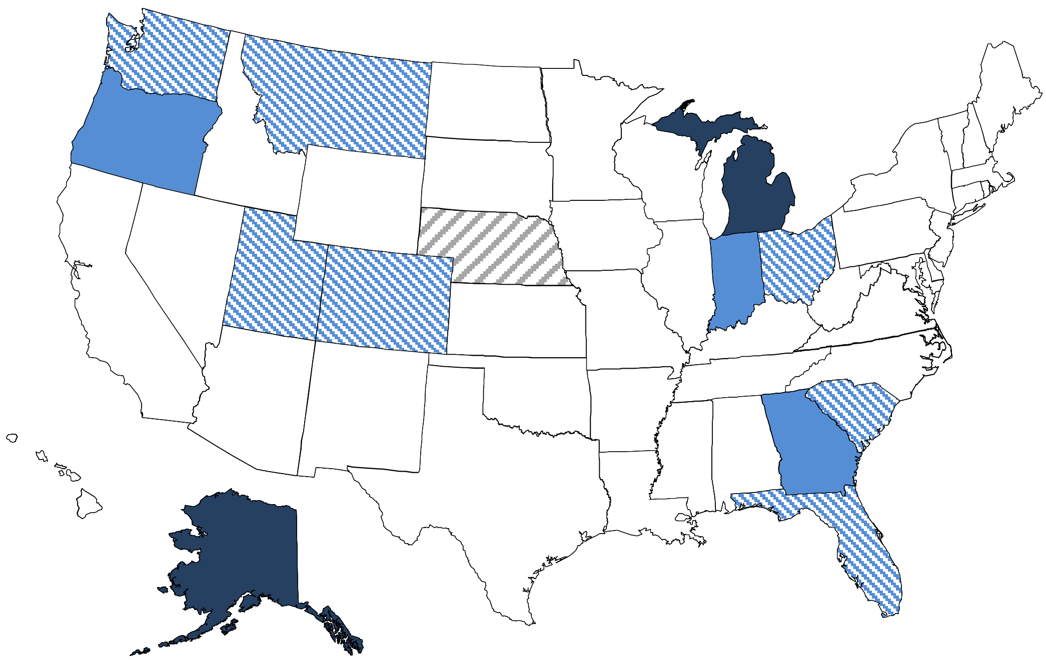
Technically a defined benefit plan, the cash balance plan guarantees participants a predetermined rate of return on their retirement savings.

Although the losses incurred in the 2008 economic downturn have prompted legislators in other states to modify their defined benefit plans, no states have chosen to close their defined benefit plans to new employees since then. Instead, among most states that have introduced alternative plan designs, participation in these new plans is optional for new hires. Those states that have opted to offer alternative retirement plans to their employees have offered one of three different types: a defined contribution plan, a combination plan, or a cash balance plan.

JLARC staff interviewed representatives from six states that have implemented mandatory or optional alternative plans. According to these representatives, the reasons their states introduced alternative plan designs varied, but the most common was to make the benefit more portable for the employees. However, predictability of employer costs and risk sharing were also cited as reasons for their states' decision to offer an alternative plan.

Figure 12 shows the different types of retirement plan designs offered to general state employees by the 50 states. It is important to note that plan types for other kinds of employees (such as teachers, local employees, and public safety officers) may or may not vary from what the state provides to its general state employees. For example, some states have entirely separate retirement systems for these categories of employees.

Figure 12: The Defined Benefit Structure Remains the Most Common Plan Design States Are Offering Their General Employees (as of December 2011)



	Plan Type	Number of States
	Mandatory Traditional Defined Benefit Plan	37
	Mandatory Cash-Balance Plan	1
	Mandatory Defined Contribution Plan	2
	Mandatory Combination Plan	3
	Choice of Primary Plan	7

Source: National Conference of State Legislatures, Boston College's Center for Retirement Research, and JLARC staff research of state retirement plan handbooks.

Six States No Longer Offer a Traditional Defined Benefit Plan to Their General State Employees

Currently, six states (Alaska, Georgia, Indiana, Michigan, Nebraska, and Oregon) do not offer their general State employees access to a traditional defined benefit plan. Two of those states (Alaska and Michigan) have implemented mandatory defined contribution plans for their newly hired employees. Michigan's mandatory defined contribution plan, the oldest state-sponsored defined contribution plan still being offered as a primary plan, currently covers all state employees hired on or after March 31, 1997. In Alaska, all general state government employees and teachers hired after July 1, 2006 are covered under the state's defined contribution program.

Georgia, Indiana, and Oregon currently offer combination plans as their primary plan for general state employees. In Georgia, for example, all new full-time State employees hired after January 1, 2009 are enrolled in Georgia's State Employees' Pension and Savings Plan (GSEPS). In this plan, employees contribute 1.25 percent of salary into the defined benefit portion of the retirement plan, and members of GSEPS are automatically enrolled in a defined contribution plan, in which the State will match employee contributions up to three percent of salary, based on employee contributions of five percent of salary.

Nebraska's general state employees were covered under a defined contribution plan from 1967 to 2002. This plan was closed for new employees in January 2003, at which time a cash balance plan was instituted in its place. Nebraska's cash balance plan guarantees its members a minimum of five percent annual investment return on their contributions.

Seven States Offer Retirement Plan Choice, and Most Employees Elect the Defined Benefit Plan or a Plan With a Defined Benefit Component

As of December 2011, seven states (Colorado, Florida, Montana, Ohio, South Carolina, Washington, and Utah) offer their State employees the option between two or three different primary retirement plans, with one option being a pure defined contribution plan. Of the seven listed, Colorado, Florida, Montana, Ohio, and South Carolina offer their general state employees the choice between a pure defined contribution plan and a pure defined benefit plan. Ohio employees also have a combination plan option.

Washington and Utah offer their general state employees the choice to participate in a combination plan or a defined contribution plan. The designs of these two states' combination plans differ, but both have defined contribution and defined benefit plan elements. For example, in Utah, new public employees default into a combination plan, but may elect to participate in a pure defined contribution plan instead within one year of their employment date. Regardless of the employee's plan choice, the employer contributes ten percent of salary to the employee's retirement plan. In Utah's combination option, if the state's actuarially required contribution (ARC) exceeds ten percent of the employees' salary, the employees contribute the difference to the plan. On the other hand, if the state's ARC is less than ten percent of salary, the employer credits the difference to a separate employee defined contribution account. According to a representative from the Utah Retirement Systems, this change was possible because the new plan would have no existing unfunded liabilities at the time of implementation.

Among states that offer a choice to participate in a pure defined contribution plan or a plan with a defined benefit, most public employees have elected to participate (or have defaulted into) in a plan with at least some defined benefit component. Table 14 summarizes the defined contribution participation rates found in Milliman Consulting's 2011 study of enrollment rates of eligible new hires into statewide optional defined contribution plans. Milliman notes that these plans "have had relatively stable election percentages in the short time they have existed."

Table 14: Participation Rates in Statewide Optional Defined Contribution Plans Among Eligible New Hires

System Offering an Optional Defined Contribution (DC) Plan	Percent of Eligible New Hires Electing DC Plan (2011)
Colorado Public Employees' Retirement Association	12%
Florida Retirement System	25
Montana Public Employee Retirement Administration	3
North Dakota Public Employees Retirement System [a]	2
Ohio Public Employees Retirement System	4
Ohio State Teachers Retirement System	9
South Carolina Retirement System	18

[a] North Dakota's DC plan covers only a small percentage of the total workforce. Milliman notes that in 2010, only 63 individuals were eligible to choose North Dakota's DC plan, and of these 63 employees, only one chose the DC plan. Utah also has an optional DC plan, first introduced in July 2011; therefore, it is too new to evaluate the participation rates.

Source: Milliman Consulting, 2011.

The participation rates in the Milliman reports are largely consistent with other studies conducted in 2008 and 2010. In February 2008, PricewaterhouseCoopers (PwC) reported a range of six to 21 percent of new employees electing a defined contribution plan among states offering them. In November 2010, VRS staff surveyed representatives from Colorado, Florida, Montana, Ohio, and

South Carolina and found the participation rates in these states to be between 7.55 and 23 percent.

Florida's relatively high participation rates may be a result of a number of factors that make it more attractive to short-service employees than the state's defined benefit, including a one-year full-vesting period into its defined contribution plan. In contrast, employees only fully vest into its defined benefit plan after eight years of service. Additionally, Florida's nine percent employer contribution into the employee's account with only a minimum three percent employee contribution may also make it relatively attractive to employees. Employees participating in Florida's defined benefit program also contribute three percent of their salary, but forgo the nine percent employer contribution in favor of a guaranteed benefit at retirement.

In interviews with representatives from other states' retirement systems, JLARC staff found participation rates to be within the ranges offered by Milliman, PwC, and VRS. Representatives from other states said the demand for their defined contribution plans is usually relatively low and that, in some cases, participation fluctuates with market performance.

REPLACING THE DEFINED BENEFIT PLAN WITH AN ALTERNATIVE PLAN COULD SUBSTANTIALLY INCREASE COSTS IN THE SHORT TERM AND HARM STATE'S OBJECTIVES

Out of concern about the long-term costs of operating defined benefit plan, legislation has been introduced in recent General Assembly sessions to close the defined benefit plan to new entrants and replace it with a defined contribution plan. In 2011, for example, House Bill 2465 would have created a mandatory defined contribution plan for new State and local employees hired after January 1, 2012. Employees hired prior to that date would have been given the choice to participate in the new plan or remain in the defined benefit plan. New employees, however, would not have the option of participating in the defined benefit plan, because it would be "closed" to new employees.

Other states have also recently studied this approach as one possible strategy to reduce public sector retirement plan costs. These include Kansas, Minnesota, Missouri, New Mexico, Nevada, and Rhode Island. Because the near-term costs associated with this approach were found to be unmanageable, none of these states closed their defined benefit plans. Based on JLARC staff's research for this study, this appears to be true in the Commonwealth's case as well.

It appears that closing the defined benefit plans would not be advantageous for the State and local governments as employers from either a cost or a human resources perspective, or advantageous for most employees. This conclusion is based on JLARC staff's review of other states' experiences with closing their defined benefit plans, as well as recommendations from Mercer and previous recommendations from PricewaterhouseCoopers. Moreover, actuaries suggest that modifying elements of the existing defined benefit plan for public employees is a preferred means of reducing long-term retirement plan costs because retaining the defined benefit plan is a better workforce management strategy. This has also been the strategy followed in Virginia for the VRS benefits.

The effects of this type of approach on costs can be summarized by the following quote from staff at the National Association of State Retirement Administrators:

> Closing off a pension plan does not in itself produce savings. You do nothing to address the cost of the existing unfunded liabilities and, when you close a plan off to new hires, you shrink the pool of new workers that can [help] pay off the unfunded liability.

Actuarial Analysis of Closing the Defined Benefit Plans Projects Sharp Increase in State Costs

House Bill 2465 (2011) would have closed the existing defined benefit plans for newly hired State and local employees and required the employees to participate in a new defined contribution plan. The VRS actuary, Cavanaugh Macdonald Consulting, LLC, analyzed how this legislation would affect future State costs if implemented. A fiscal impact statement used the actuary's analysis.

The fiscal impact statement produced for this bill highlighted three potential effects of replacing the defined benefit plan. These effects include increasing contribution rates in order to extinguish the existing liabilities, detriment to the plans' cash flow, and the need to move toward more conservative investments.

Closing the Defined Benefit Plan Would Result in Higher Contribution Rates. The VRS actuary estimated that in the first year, contribution rates for the State employees' plan would need to increase by more than ten percent of payroll, and by nine percent of payroll for the teachers' plan. This is because "in order to accelerate amortization of the unfunded liability on a shrinking payroll base, contribution rates would need to be increased substantially in the year the plan closes and increased dramatically over the next 20 to 30 years." The amortization, or payoff, of the unfunded liabilities would need to accelerate because accounting rules governing pension plans require that the amortization period switch from a "rolling" period to a fixed period in the event of a defined benefit plan closure. This would mean that the payoff period would not reset to 30 years every year and the full balance of the plans' liabilities would have to be paid for over a fixed 30-year period.

For the State employees' and teachers' plans, the range in the costs that would be incurred by the State in addition to the costs of maintaining the current defined benefit plan would be $331 to $340 million in the first year. As a percent of payroll, the contribution rates would continue to increase over the long term until the last active employee under the defined benefit plan retires. Savings would not begin to accrue to the State until year 15. In year 15, the maximum estimated State savings for the State employee and teacher plans combined would be $155 million. (Savings are calculated by subtracting the combined costs of the closed defined benefit plan and the defined contribution plan from the costs the State would have incurred by continuing the existing defined benefit plan.)

Closing the Defined Benefit Plan Could Negatively Impact Cash Flow and Require a More Conservative Investment Strategy. In addition to increasing costs over the next ten to 15 years, closing the defined benefit plan would have negative impacts on the cash flow into the defined benefit plans. While most older pension plans experience negative cash flow, closing the defined benefit plan could widen the gap between payments out and contributions in because of the smaller payroll base from which to draw contributions.

The negative impact of the plans' cash flow could also alter VRS' investment strategy. The fiscal impact statement also observed that closing the defined benefit plan would likely force VRS to alter its investment portfolio to improve the liquidity—or accessibility—of trust fund assets. This is because "over time, the trust fund will go cash flow negative and require the liquidation of assets to meet continuing benefit payments."

A more liquid portfolio would likely result in allocating assets among investments with lower expected returns. As a result, if the VRS board were to reduce the assumed investment return on the portfolio, less of the plans' costs would be expected to be covered by investment earnings, and this gap would have to be made up for through higher employer and employee contributions.

Feedback From State and Local Employees Suggests That Replacing the Defined Benefit Plan Could Have Disadvantages From the Employer and Employee Perspectives

In addition to the cost impact of closing the defined benefit plans to new entrants, experts have raised concerns about the impact of this approach on the public sector workforce. These concerns fall into two main categories. The first is the potential negative impact on government's ability to remain competitive as an employer. The second is the adequacy of the benefits earned in a defined contribution program.

Closing the Defined Benefit Plan Would Eliminate a Key Component of Compensation That Has Maintained the State's Competitiveness. Maintaining a defined benefit retirement program for existing and future employees could be important to the State's ability to remain competitive as an employer. As stated in Chapter 2, State employee compensation has declined compared to compensation for employees of other large employers in and around Virginia. With respect to retirement benefits, however, Mercer ranked the Commonwealth highly (fourth for Plan 1 provisions and fifth for Plan 2 provisions), and stated that the State's ability to retain its relatively competitive position was "driven by a favorable…comparison in the defined benefit area." Ten of the organizations identified as competitors for the State's workforce did not offer a defined benefit plan. Mercer's findings suggest that by providing a defined benefit retirement plan, the State has been able to remain relatively competitive, despite a growing gap in the cash compensation it offers compared to Mercer's peer group.

Additionally, closing the defined benefit plan could adversely affect agencies' ability to recruit and retain qualified employees. This is based on JLARC staff findings about the importance of the plan for recruitment and retention, as described in Chapter 2. More than half (52 percent) of the human resource managers responding to JLARC staff's survey reported that replacing the defined benefit plan with a defined contribution plan would have a negative impact on their agencies' ability to recruit qualified employees.

Closing the Defined Benefit Plan Could Make Retirement Unaffordable for Many Employees. One of the concerns expressed by human resource managers about mandating a defined contribution plan for newly hired employees is whether employees would be able to retire under that type of plan. These managers view the defined benefit plan as an effective mechanism for ensuring that employees maintain necessary levels of productivity while working and then can exit the workforce at an appropriate time. These managers expressed concern that a defined contribution plan would not allow employees a reasonable chance to retire at all, which would have implications for workforce productivity. For example, one respondent to JLARC staff's survey of human resource managers stated, "Already, there are employees who cannot afford to retire under current defined benefit provisions. The productivity of the workforce will be negatively affected simply because they cannot afford to leave."

As will be discussed, the primary obstacles to retirement under a defined contribution plan are that in many cases employee savings rates and investment earnings are expected to be too low to earn a sufficient retirement benefit after a full career. This consideration, combined with the costs associated with closing the defined benefit plan to new hires, indicate that replacing the defined benefit plan with a mandatory defined contribution plan for new employees would not be in the State's best interest either in terms of costs or in terms of workforce management.

Because of these workforce management and cost concerns, JLARC staff did not consider closing the defined benefit plan and replacing it with an alternative plan as an option for this study. Instead, JLARC staff evaluated the features, desirability, and impacts of optional alternative plans.

SOME VIRGINIA STATE AND LOCAL EMPLOYEES WOULD CONSIDER ALTERNATIVE PLAN DESIGNS, BUT MOST PREFER THE CURRENT DEFINED BENEFIT PLAN

No data exists to predict precisely what proportion of new and existing employees would participate in an alternative plan if offered the choice. However, according to JLARC staff's survey of State employees and interviews with State and local employees, some participants expressed an interest in being offered the choice to participate in an alternative retirement plan. Based on State employee survey results, newer employees (those with fewer than five years of service) appear more willing to participate in an alternative plan than employees with five or more years of service. Nevertheless, the defined benefit plan remains the most preferred design in both groups.

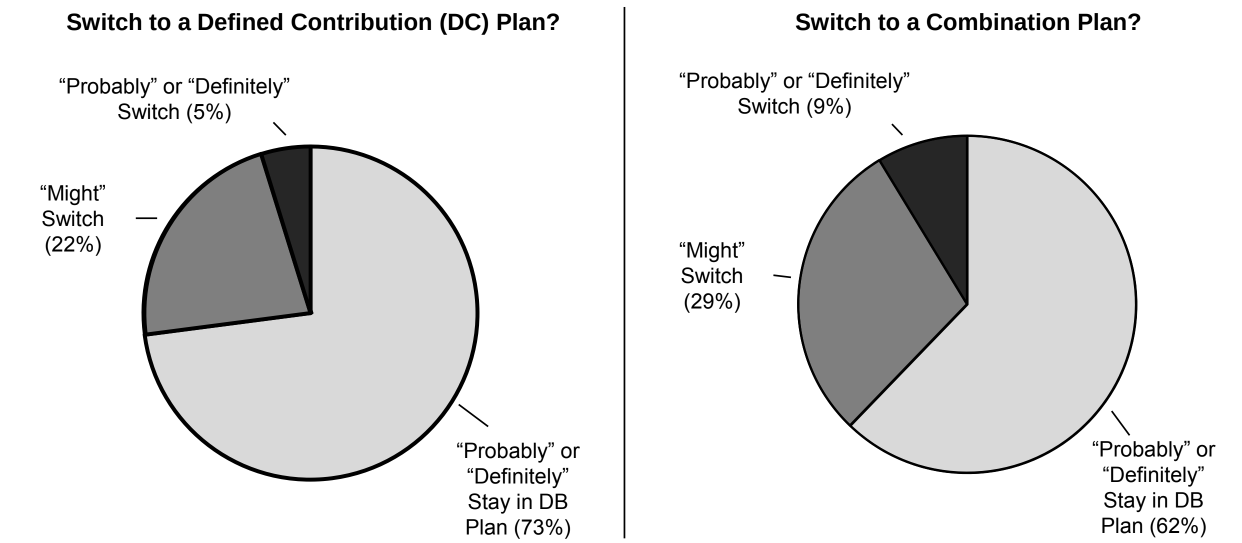
Most State Employees Prefer the Basic Features of Defined Benefit Plans Over Those of Defined Contribution Plans

Most employees prefer a retirement benefit that reflects the characteristics of the current VRS benefits. Without indicating whether it is a feature of a defined benefit or defined contribution plan, State employees were asked to choose between features of the two different plan designs. Seventy-six percent of employees said they would prefer a retirement plan that is guaranteed for life, even if they are not eligible until after they retire (defined benefit feature), compared to 24 percent who would prefer a benefit that is not guaranteed, but that the employee can access at any time in their career (defined contribution feature). Similarly, 76 percent of employees would prefer to receive most of their retirement funds periodically during retirement (defined benefit feature), compared to 24 percent who said they would prefer to have the option to receive all of their retirement funds in one lump sum when they retire (defined contribution feature). Finally, 66 percent of State employees said they would prefer a benefit amount that is determined by a formula (defined benefit feature), compared to 34 percent who said they would prefer one that is partially dependent on how much they contribute to their own retirement account (defined contribution feature), acknowledging the increased risk involved in such a decision.

Some State and Local Employees Would Consider Switching to an Alternative Plan, but Most Would Likely Remain in the Defined Benefit Plan

As Figure 13 illustrates, when offered the irreversible option to switch out of the defined benefit plan and into a defined contribution plan, only five percent said they would "probably" or "definitely" switch, while another 22 percent of survey respondents said they "might" switch to a defined contribution plan. The remaining 73 percent of survey respondents said they would "probably" or "definitely" stay in the defined benefit plan if offered the choice. Nine percent of survey respondents said they would "probably" or "definitely" switch to a combination plan if it was offered as an optional primary plan, while an additional 29 percent said they "might" make this switch.

Figure 13: State Employees Are More Likely to Switch to a Combination Plan Than a Defined Contribution Plan, but Most Employees Would Stay in the Defined Benefit Plan



Source: JLARC staff survey of State employees, 2011.

Local Employees and Teachers Also Appear to Prefer Current Defined Benefit Plan Over Alternative Plan Designs

In interviews with local government employees, JLARC staff also found some interest in alternative plans, but to a lesser extent than State employees. Relatively few local employees said they would switch to an alternative plan if offered the choice, but most acknowledged there may be some employees who would find an optional defined contribution or combination plan appealing. For example, some group interview participants said younger employees might find an alternative plan attractive. Younger employees, they said, are less likely to stay a full career with one employer, so they may be attracted to a more portable benefit, such as that which could be offered through a defined contribution plan.

Some local employees also said they believed there might be some employees close to retirement age who would value a defined contribution plan. According to local interviewees, late-career prospective hires may value a defined contribution plan because they may not believe they will be working under a VRS-covered position for enough years to accumulate a meaningful benefit. Instead, with a defined contribution plan, these individuals may value the opportunity to build on their existing savings. According to Mercer, however, these plans are not a recruitment tool for mid- or late-career hires because

> the accumulation of a defined contribution plan is generally lower than the accumulation of benefits under a defined benefit plan. This is particularly true for mid-career hires because there is less time to accumulate a benefit comparable to the guaranteed benefit payable from a defined benefit plan.

Most teachers JLARC staff interviewed said they preferred the defined benefit plan design to alternative options, but some teachers also agreed that defined contribution plans might be attractive to new, early-career teachers. However, they cautioned that providing a more portable benefit could negatively affect efforts to retain teachers. According to representatives from the Virginia Education Association, as well as teachers interviewed by JLARC staff, teacher retention is already a challenge, as few new teachers plan to remain in the profession for an entire career. For example, in an interview with JLARC staff, one teacher said, “I am concerned with establishing a system that encourages teachers to leave.”

At Least Nine Percent of New Hires Would Likely Choose a Defined Contribution Plan, and at Least 17 Percent Would Likely Choose a Combination Plan

Defined Contribution Option in Survey Modeled After Legislative Proposal

The defined contribution plan presented to State employees in the JLARC staff survey was modeled after the plan design outlined in House Bill 2410 (2011), which is discussed later in this chapter.

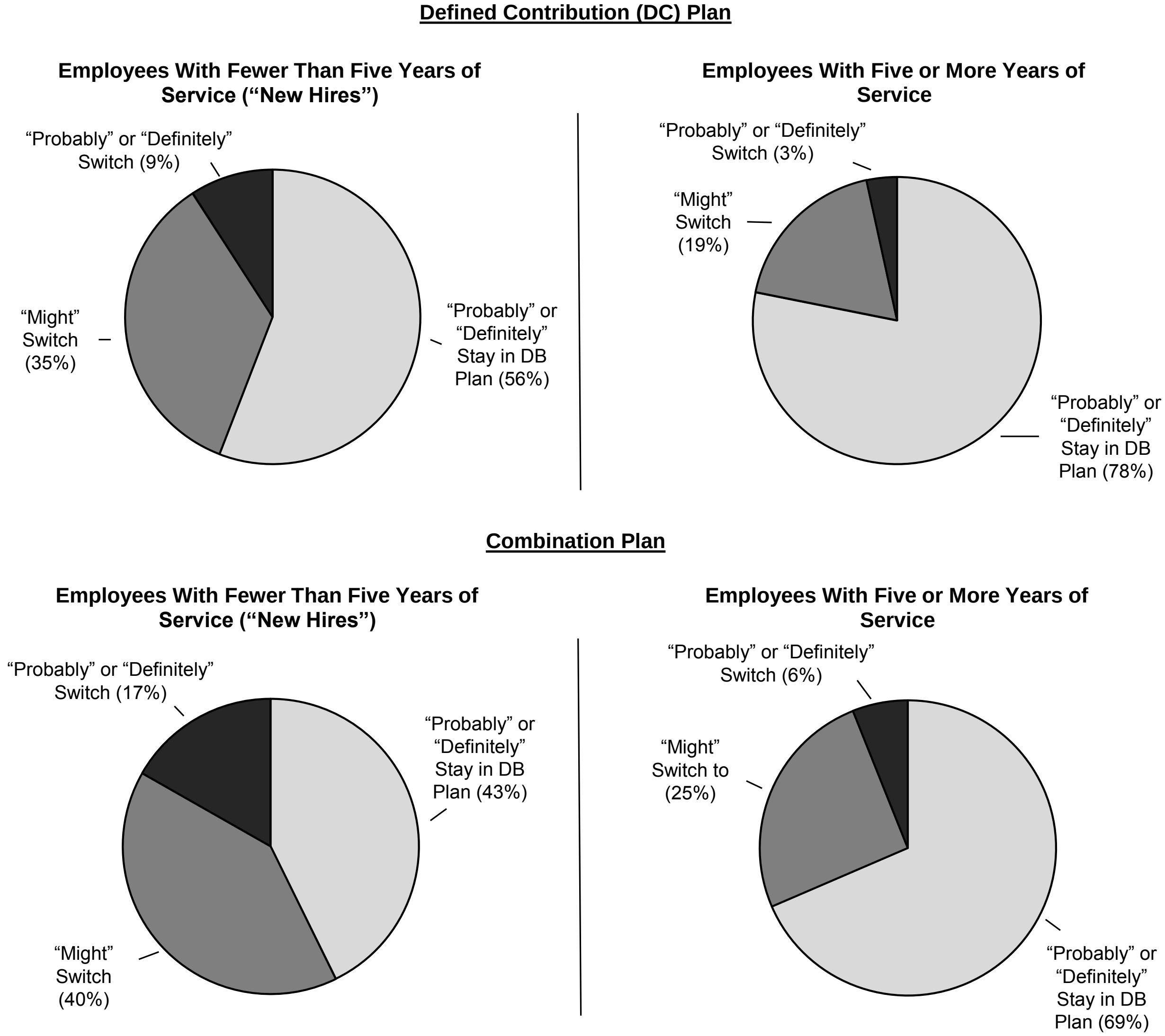
As previously mentioned, while data are not available to predict precisely the percentage of future hires that would choose an alternative plan, analysis of the responses by newly hired employees to the JLARC staff survey of State employees provides a range. Using State employees with fewer than five years of service as a proxy for new hires, nine percent of these employees said they would "probably" (seven percent) or "definitely" (two percent) switch to a defined contribution plan if offered the irreversible option (Figure 14). While this nine percent is relatively consistent with participation rates in other states, an additional 35 percent of new employees indicated they "might" switch to a defined contribution plan if offered the option. Fifty-six percent of new hires said they would "probably" or "definitely" remain in the defined benefit plan if offered the choice of switching to a defined contribution plan.

If offered a combination plan, 17 percent of survey respondents with fewer than five years of service said they would "probably" or "definitely" switch. Additionally, 41 percent of new employees surveyed said they "might" switch to a combination plan if offered the option. The remaining 42 percent of new hires surveyed said they would "probably" or "definitely" remain in the defined benefit plan.

Using existing employees as a proxy for future hires may underestimate potential participation rates, as existing employees are already participating in the defined benefit plan and may perceive that a switch would result in a loss or that they would have to "start over." However, the estimated participation rates do appear to be consistent with experiences in other states and with feedback obtained through interviews with retirement experts and State and local employees.

Ultimately, actual participation rates would depend on conditions such as the quantity and quality of the education provided to new hires to assist them with their choice, the plan's cost to employees compared to the defined benefit plan's costs, the amount of the employer contribution into the employee's account, the employer's history of fully and consistently making its contribution, the vesting period, and the state of the economy, which could affect risk tolerance.

Figure 14: New State Employees Appear to Be More Willing to Consider Switching to an Alternative Plan Than Existing Employees



Source: JLARC staff survey of State employees, 2011.

OPTIONAL ALTERNATIVE PLANS MAY POSITIVELY AFFECT RECRUITMENT, BUT MAY NEGATIVELY AFFECT RETENTION

As stated in Chapter 2, retirement plans are not the strongest recruitment tool available to the State. However, alternative retirement plans could potentially assist some agencies in their recruitment efforts. Specifically, short-term or highly mobile employees may find an alternative plan attractive if it has a more portable benefit than the current defined benefit plan.

However, one potential adverse effect of increased portability for the employee is increased turnover at State and local public agencies. The defined benefit plan appears to be an effective retention mechanism for State and local public employers. To the extent that an employee chooses a more portable retirement benefit, he or she may have less of an incentive to remain with the State or local governments. The costs associated with turnover (for example, recruitment and retraining), therefore, is one consideration to be made when evaluating the costs of introducing the optional alternative retirement plan. As described below, some State human resource managers believe that there is a potential benefit of an optional alternative plan in their efforts to recruit qualified employees, but a slightly greater proportion are concerned about the potential adverse effect on their agencies' retention efforts.

Optional Alternative Plan Might Benefit Recruitment of Some Mobile Employees

One disadvantage experts cite about the defined benefit plan is the fact that the employer contributions are typically less portable than alternative plans. As mentioned earlier, a defined contribution or combination plan may be attractive to occupations seeking prospective employees who view themselves as mobile. These prospective employees may value the defined benefit plan less than an alternative plan if they do not believe they will work enough years under a VRS-covered position to accrue a significant retirement benefit. Instead, these employees may prefer the opportunity to create a portable retirement account.

As an approximation for "mobile" employees, JLARC staff used the State employee survey to analyze plan type preferences among those who do not plan to work for the State long enough to collect VRS retirement benefits. While JLARC staff expected a defined contribution plan to be popular among those who consider themselves "mobile," only 20 percent of those who do not plan to work long enough to collect VRS benefits said they would "probably" or "definitely" switch to a defined contribution plan if offered the choice. However, an additional 40 percent of those respondents said they "might" switch to a defined contribution plan. These figures were slightly higher if a combination plan were to be offered, where 33 percent of employees said they would "probably" (31 percent) or "definitely" (two percent) switch, and 36 percent said they "might" switch.

To attract employees with shorter tenures and those who are highly mobile, the State has already established optional defined contribution plans for university faculty, school superintendents, and political employees. If the General Assembly believes it to be important to recruit employees outside of these occupations who plan to have shorter tenures with the State or other VRS-covered employers, implementing such an option for all State employees could be advantageous.

One-Half of Human Resource Managers Predict an Alternative Plan Would Have No Impact on Recruitment, While One-Quarter Predict It Would Negatively Impact Retention

According to the results of a JLARC staff survey of State agency human resource managers, an optional alternative plan could assist some agencies in their ability to recruit staff. Specifically, 24 percent of human resource managers predicted a positive impact on their recruitment efforts. However, 53 percent reported that it would have no impact on their recruitment efforts. Sixteen percent said that it could have a negative impact.

Forty-one human resource managers reported that their agencies were currently experiencing recruiting difficulties. Of these, 32 percent said an optional alternative retirement plan could have either a somewhat positive impact or a strong positive impact, with 51 percent reporting it would have no impact. Only three of these agencies predicted a negative impact on recruitment.

A greater proportion (27 percent) of State human resource managers surveyed predicted that it would negatively affect retention. Of the 30 State human resource managers who said their agencies were experiencing retention difficulties, 27 percent believed optional alternative plans would have a somewhat positive impact on their retention efforts, 30 percent predicted a somewhat or strong negative impact on employee retention, and 33 percent said it would have no impact.

OPTIONAL DEFINED CONTRIBUTION OR COMBINATION PLAN COULD CHALLENGE MANY EMPLOYEES' ABILITY TO MEET RECOMMENDED INCOME REPLACEMENT TARGETS

The ability of a defined contribution plan participant to achieve an adequate retirement benefit depends on the participant's ability to contribute enough money to his or her retirement accounts and on the investment performance of the participant-managed accounts. Because of this, employees who cannot afford to contribute sufficient amounts do not understand the importance of their contributions, or who have little understanding of how to invest their assets are unlikely to achieve an adequate retirement benefit.

JLARC staff asked State and local employees how much they thought they would be able to contribute to a defined contribution account and how much guidance they would need in managing those accounts. Ensuring that employees have the knowledge and resources to participate effectively would be essential to the plan's ability to allow employees to retire at an appropriate time and with adequate income.

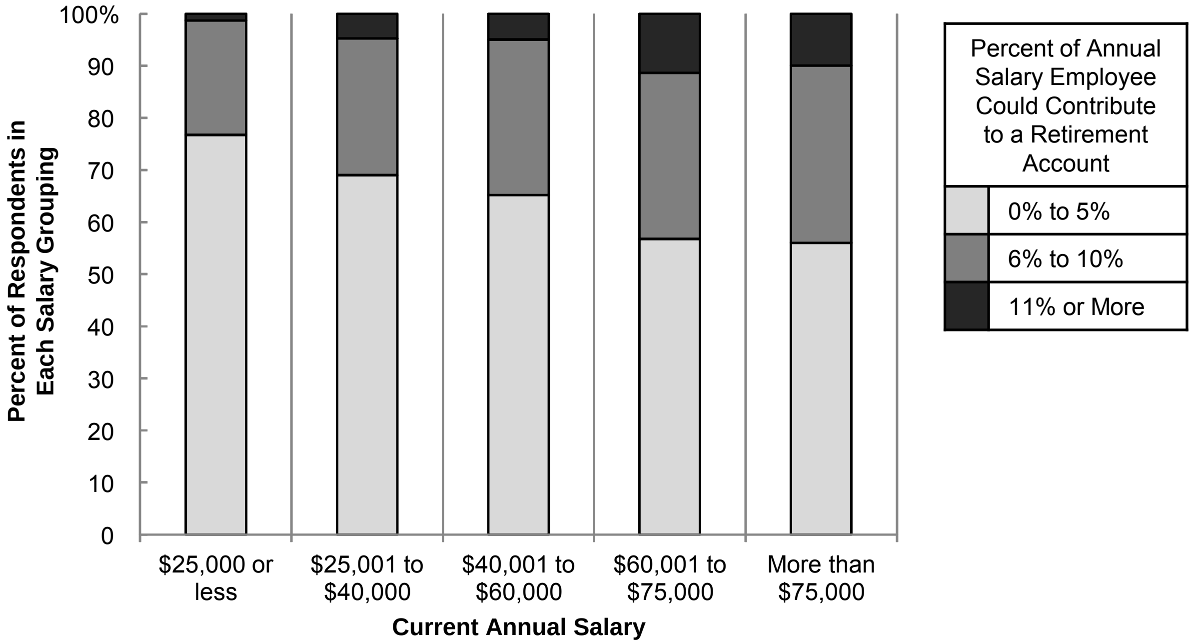
Two-Thirds of State Employees Are Not Likely to Contribute More Than Five Percent of Their Salary to a Retirement Account

While the income replacement potential of a plan is important to understand before implementing it, the likelihood that an employee will be able to contribute enough of his or her pre-retirement salary to meet the income replacement potential of the plan is also an important consideration. When employees assume a greater (or complete) responsibility for saving for retirement, to generate sufficient retirement savings, they must be able to set aside a sufficient amount of their salary each year while employed. Lower cash compensation is likely to result in a lower ability to save, as individuals in lower income levels will have less discretionary income than those with higher salaries. Considering Mercer's analysis presented in Chapter 2, which showed the State's uncompetitive salaries, generating sufficient savings on their own would be a challenge for many, especially lower-income, State employees.

During group interviews with JLARC staff, local employees, teachers, and State employees expressed doubt that they would contribute enough to a defined contribution account to achieve adequate income replacement at retirement. As shown in Figure 15, according to State employee survey results, most employees indicated they would contribute no more than five percent of their salary to a retirement account. As the graphic illustrates, employees in the lowest salary groups will be the least likely to contribute more than five percent. As discussed later in this chapter, under the defined contribution plan evaluated for this study, employees would need to contribute between eight and nine percent of salary over a full career to achieve adequate income replacement.

Based on these figures and on Mercer's analysis of income replacement in defined contribution plans with low contribution rates, it is likely that a high percentage of employees would not contribute into a defined contribution or combination plan at a level sufficient to result in an adequate benefit at retirement. However, with a high employer contribution or match, some employees could potentially build adequate savings.

Figure 15: Most State Employees Said They Could Contribute No More Than Five Percent of Their Salary to a Retirement Account



Note: Bars represent 100 percent of survey respondents in each salary grouping.

Source: JLARC staff survey of State employees, 2011.

Historical Returns in Individual Defined Contribution Plans and State Employee Survey Data Suggest Employees Will Need Investment Guidance and Education

If an employee elects to participate in an optional defined contribution plan or combination plan, the investment performance of an employee's savings will play a significant role in the employee's ability to build adequate savings for retirement.

Historical experiences of two states, West Virginia and Nebraska, where their mandatory defined contribution plans were closed and replaced by a defined benefit and cash balance plan, respectively, suggest employees will need investment guidance and education in order to generate sufficient returns. For example, Milliman Consulting notes that in Nebraska "employees were receiving a replacement ratio of their pre-retirement income closer to 30 percent rather than the projected 50 to 60 percent." According to Nebraska Public Employee Retirement Systems, one reason for these less than adequate returns was the tendency for public employees to invest more conservatively than the investment professionals directing the state's defined benefit plans. According to Milliman Consulting, during this time "nearly 50 percent of defined contribution plan member contributions were invested in the stable value fund," which is much more conservative than other investment options. While the employee may better protect his or her assets from losses by participating in the stable value fund, the rates of return on the investments are typically significantly lower than other investment options that carry greater risk.

Employees surveyed and interviewed appear to understand their need for guidance and education if they were to participate in a defined contribution or combined plan as their primary plan. In fact, 89 percent of State employees surveyed reported they would need at least some guidance in deciding how to invest their retirement funds. Similar concerns were raised during group interview sessions with State and local employees, where employees said education and investment training would need to be a significant component of the introduction of any plan that shifted investment risks to the employees.

Due to the financial collapse, balances in 401(k) plans… "have lost 30 percent of their value, reducing the median for those approaching retirement from $78,000 to $56,000."

Still, the experiences of 401(k) plans nationwide suggest that, even with guidance and education, employees are unlikely to accumulate sufficient savings in a defined contribution plan. For example, according to the Center for Retirement Research, "The typical private sector taxpayer approaching retirement (ages 55-64) had accumulated only $78,000 in 401(k) assets before the financial crisis." Due to the financial collapse, balances in 401(k) plans in this population "have lost 30 percent of their value, reducing the median for those approaching retirement from $78,000 to $56,000." Where retirees need to generate approximately 80 percent of their pre-retirement income *annually*, it is likely that many of these individuals will outlive their retirement assets, need to reduce their standard of living, or both.

TWO OPTIONS FOR ALTERNATIVES TO THE DEFINED BENEFIT PLAN WERE EVALUATED

Two alternative plan designs were evaluated. The first of these is a plan recently considered by the General Assembly. The other was developed jointly by Mercer and JLARC staff. In developing and evaluating these options, other states were consulted, an extensive literature review was conducted, and public employee feedback was gathered. The primary aspects evaluated of both plans included their income replacement impacts on employees at retirement, their impact on the State's recruitment and retention objectives, and the projected costs of each plan to the State.

These plans are unlikely to produce significant cost savings and could increase costs through at least FY 2022. However, to the extent that employees enroll in an alternative plan, they will reduce the State's future benefit obligations. These options would also provide prospective employees interested in defined contribution plan features further incentive to consider joining the State workforce. As stated earlier in this chapter, although there is some interest in an alternative plan among current employees, most employees (regardless of tenure) prefer the current defined benefit plan.

2011 Legislative Proposal Would Have Implemented an Optional Defined Contribution Plan

Legislation was introduced in the 2011 General Assembly Session (HB 2410) that would have offered State and local employees the option of participating in a defined contribution plan as an alternative to the current defined benefit plan. The legislation was passed by indefinitely during the Session.

The defined contribution plan outlined in HB 2410 would have required employees to contribute a minimum of five percent of the employee's salary into the employee's investment account and the employer to provide a match of the same amount (totaling a minimum ten percent of salary). The employer would match 100 percent of the employee's voluntary contributions, up to 3.5 percent above the five percent mandatory contribution. The maximum total contribution from the employee and the State would have been 17 percent under this plan. Employer contributions would be vested at 20 percent after each year of service for the employee's first five years.

The alternative plan would have also included a disability benefit for those who chose to participate. Employees would not participate in the Virginia Sickness and Disability Program (VSDP), currently provided to current VRS members. Instead, the plan would offer a long-term disability (LTD) plan similar to that of the VSDP plan. Unlike the current LTD plan offered in the VSDP, it would not include a cost-of-living adjustment on the LTD benefit, a contribution would be made by this LTD benefit to the defined contribution plan, and disability benefits would cease to be paid under certain conditions. Members of this defined contribution plan would also be eligible for life insurance benefits, a health insurance credit, and long-term care coverage.

New hires would have 60 days to make an irrevocable election between the new defined contribution plan and the existing defined benefit plan. Existing employees could switch to the new plan before a set date, but employees would not be allowed to transfer the full actuarial value of their defined benefit to the new plan. Instead, they would only be allowed to transfer their accumulated contributions and interest under their defined benefit plan or, if applicable, the balance in their optional retirement plan account.

HB 2410 Included an Employer Surcharge to Reduce Cost Impact of the New Optional Plan on the Existing Defined Benefit Plan. As more employees opt to participate in the HB 2410 defined contribution plan, fewer employees would be enrolling in the existing defined benefit plan. Consequently, their contributions would not be directed into the trust fund and, therefore, could not be used to help pay for the actuarial losses created by the defined contribution plan and for the defined benefit plan's existing unfunded liabilities. Additionally, the payroll upon which the employer contributions into the defined benefit plans are based would decrease as employees enroll in the defined contribution plan, and so fewer dollars from the employer contribution would be dedicated to the defined benefit plans.

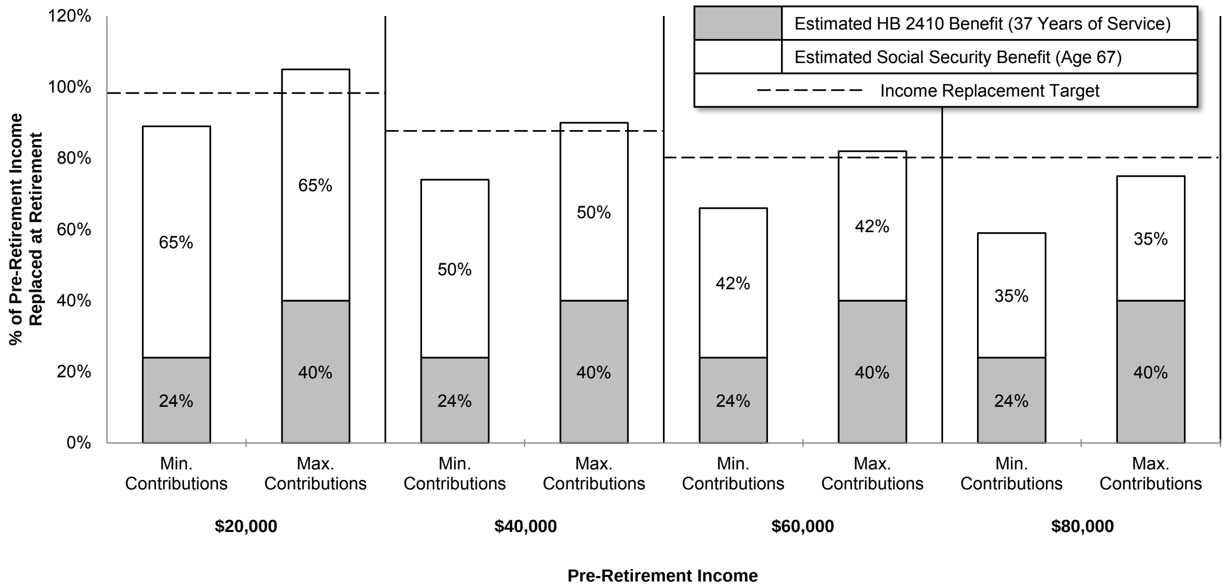
Importantly, HB 2410 would have included a "surcharge" that would have been paid by the employer for each employee, regardless of the plan the employee chose. The purpose of the surcharge was to reduce the risk of undermining the funding of the existing plan and its liabilities due to the actuarial losses created by new participants electing to participate in the defined contribution plan.

This practice is also employed in other states with optional alternatives to the defined benefit plan. For example, in South Carolina, the state's retirement system currently charges each employer 4.385 percent in addition to the normal five percent employer contribution into the employee's account to help fund the state's existing defined benefit plan.

HB 2410 Plan Could Have Potentially Provided Adequate Income Replacement, but Adequacy Would Be Dependent on Employee Contributions and Rate of Return. According to Mercer, the provisions of this proposal would provide employees with the potential to achieve adequate income replacement. As shown in Figure 16, individuals, except those at the $80,000 level, retiring at the age of 67 and with 37 years of service and with unreduced Social Security benefits could achieve adequate income replacement if the employee contributed enough to secure the maximum employer match throughout their career.

Meeting this adequacy threshold would depend on the employee's willingness or ability to contribute 8.5 percent of salary towards retirement consistently throughout his or her career and the performance of the employee's investments. Based on State employee survey results and local employee interviews, most employees could not contribute the full 8.5 percent and, therefore, would not meet the income replacement target.

Figure 16: At Age 67 With 37 Years of Service, Participants in the HB 2410 Plan Could Meet Income Replacement Targets With Contributions Above Five Percent of Pay



Note: Figure assumes four percent pre-retirement investment returns and the individual purchases an annuity with four percent investment returns and 2.5 percent benefit increases. It is likely that an individual would not purchase an annuity with a defined contribution account balance that includes 2.5 percent increases. However, this assumption was made so that the defined contribution annuity could be comparable to the current retirement plan annuity.

Source: JLARC staff and Mercer analysis of House Bill 2410 (2011) provisions and Social Security benefits.

An individual making $40,000 who retires at age 67 after a 30-year career is projected to have income from this defined contribution plan that is between 12 and 22 percentage points below Mercer's recommended income replacement targets, even with an unreduced Social Security benefit.

The average State employee retiring in 2011 retired with only 23.3 years of VRS-covered service. Therefore, the benefits presented in Figure 16 should not be interpreted as the benefits most employees would actually receive through HB 2410. For example, an individual making $40,000 who retires at age 67 after a 30-year career is projected to have income from this defined contribution plan that is between 12 percentage points (at five percent employee contributions) and 22 percentage points (at 8.5 percent employee contributions) below Mercer's recommended income replacement targets, even with an unreduced Social Security benefit. Accordingly, individuals with fewer years of service will have larger gaps.

Thirty-seven years of service was chosen to analyze the potential adequacy of the benefit for an employee who works a full career (or close to a full career) under a VRS-covered position. It is reasonable to expect that employees who work less than a full career with the State would have retirement savings they have accrued while working outside the VRS system to cover any gap between the combination of the VRS benefit and Social Security benefit and the individual's recommended income replacement targets.

Similarly, an employee making $40,000 who retires with 30 years of service, but before eligibility for a Social Security benefit, will initially replace between 16 and 26 percent of this income, depending on employee contributions of five or 8.5 percent, at retirement through this optional defined contribution plan, significantly below Mercer's recommended targets. When eligible for Social Security, the replacement figures would rise, but would still be lower than the 67/37 scenario presented in Figure 16, because the benefit would be based on fewer years of service and fewer years of contributions to the defined contribution plan.

HB 2410 Plan Could Be Attractive to Short-Service Employees, but Could Negatively Affect Retention Goals. Mercer analyzed the design of this plan and concluded that it would be a competitive plan for recruiting new, early-career employees. The design would be particularly attractive to short-service employees because the accumulation of defined contribution assets is generally higher than the accumulation of benefits under a defined benefit plan in the short term. Mercer also found that the proposal provides a significantly higher match than the defined contribution plans offered by the State's peers analyzed in its 2011 total compensation analysis.

Under this proposal, employees with longer service would accrue benefits at the same rate as employees with shorter service. As a result, Mercer notes an employee would have no incentive to become a long-service employee. Therefore, if offered, it could be expected to have a negative effect on retention compared to the existing defined benefit plan.

Cumulatively, HB 2410 Plan Could Increase Costs of Retirement Benefits for General State Employees and Teachers by Between One and Four Percent Through FY 2022. The VRS actuary analyzed the cost impact of implementing a defined contribution plan designed like HB 2410. The plan would be optional for newly hired as well as existing employees. In order to develop the cost estimates, the actuary had to make different assumptions about the numbers and types of future and existing employees who would choose the plan. Three different estimates were developed for this plan – one assumed that five percent of newly hired and existing employees would choose the alternative plan, the second assumed a ten percent election rate by new hires and existing employees, and the third assumed a 20 percent election rate. In all three scenarios, the actuary assumed that the existing employees that would switch to the alternative plan would be employees with fewer than five years of service who had not yet vested in the defined benefit plan. These participation rates were selected by the VRS actuary and represent a reasonable estimate of the range of participation rates that could be expected, based on other states' experiences and feedback from State and local employees.

According to the VRS actuary, the HB 2410 plan could result in greater retirement benefit costs for State employees. Cumulatively, through FY 2022, the actuary estimated that the cost increases would range from $66 to $324 million. This amounts to an increase of between 0.92 and 4.52 percent in cumulative contributions that would be otherwise expected through FY 2022.

The high cost estimate ($324 million) assumes a participation rate of 20 percent by newly hired and nonvested existing employees and a maximum employer match for all plan participants (8.5 percent). The low cost estimate ($66 million) assumes a lower participation rate (five percent of newly hired and nonvested existing employees) and a minimum employer match for all plan participants (five percent).

According to the VRS actuary, the HB 2410 plan could result in greater costs for teachers' benefits as well, approximately two-thirds of which would be borne by local school divisions. Cumulatively, through FY 2022, the actuary estimated that the cost increases would range from $131 to $620 million. This amounts to an increase in cumulative contributions of between 0.83 and 3.95 percent over what would be otherwise expected through FY 2022. The low and high estimates are also based on the assumptions outlined above.

In aggregate, if a plan designed like HB 2410 were offered to State employees and teachers, between $197 and $944 million in added costs could be expected through FY 2022. This amounts to an increase in cumulative costs of between 0.86 and 4.13 percent of the total projected cumulative contributions that would otherwise be expected through FY 2022 for the State employees' and teachers' plans.

HB 2410 Plan Costs Would Be Driven Primarily by Its Interaction With the Existing Liabilities of the Defined Benefit Plan. Given the system's current need for additional funds to pay for the defined benefit plan's existing unfunded liabilities, even with a surcharge in place, higher participation and a higher employer match in the defined contribution plan would result in higher costs of the defined benefit plan to the State. As the costs of the defined benefit increase, the cost of the surcharge in the defined contribution plan would also increase.

The role of participation and employer match rates in the defined contribution plan on the defined benefit plan's current costs can be illustrated through two example match rate scenarios. In the first, the employer matches an employee contribution of five percent of salary into the employee's defined contribution account and the required employer contribution for employees participating in the defined benefit plan is nine percent of salary. Under this scenario, the employer would pay a surcharge of four percent of salary. If, instead, the employer paid a match of 8.5 percent of salary into an employee's defined contribution account and the required contribution into the defined benefit plan was nine percent of salary, the employer's surcharge would be 0.5 percent of salary. The 3.5 percent difference between the surcharges in these two scenarios is the difference in the amount that would be diverted into the trust fund due to the different match rates.

Thus, even with a surcharge, as more employees take advantage of the highest employer match, less money would be diverted back into the trust fund to pay for the actuarial losses created by the defined contribution plan and for the defined benefit's existing unfunded liabilities. As less money flows into the trust fund from employees, the required employer contribution in the defined benefit plan (the cost of the defined benefit plan to the State) would increase. This explains why HB 2410's lowest cost impact occurs under a low participation, low employer match rate (five percent of salary), and its highest cost impact occurs where there is high participation and a high employer match rate (8.5 percent of salary).

The VRS actuary also assumed that if existing employees were given the option to switch from the current defined benefit plan to the defined contribution plan, employees who are not yet vested in the defined benefit plan would be the most likely to switch. Younger and shorter-tenured employees are cheaper to fund in the defined benefit plan than older employees. Because the cheapest employees to fund in the defined benefit plan are expected to be most likely to switch plans, this would also contribute to the projected cumulative costs of the alternative plan through FY 2022.

Implementing a Combination Plan Would Provide Some Guaranteed Benefit, and Could Reduce State's Future Costs

Guided by the State's goals for offering a retirement plan to its employees, the competitiveness analysis of the State compared to its peers, and income replacement needs of State employees, a combination plan was also developed, which includes both defined benefit and defined contribution components. In this combination plan, the defined benefit component—the guaranteed portion of the plan—would be lower than the existing defined benefit plan. Instead of providing a 1.7 percent multiplier, which is multiplied by the employee's average final compensation (AFC) and his or her years of service, the new optional combination plan benefit multiplier would be set at 1.0 percent. To participate, the employee could be required to contribute a mandatory four percent of salary into the defined benefit component.

The combination plan would also include a defined contribution component and could require employees to contribute a minimum of one percent of their salary into their defined contribution account. Under this plan, the employer would match employee contributions up to two percent of salary and then half of each percent an employee increases his or her contributions from three percent to five percent of salary. The maximum employer match into the defined contribution component would be 3.5 percent of the employee's salary. To reach the maximum employer match, employees would need to contribute a total of nine percent of salary, with a mandatory four percent directed into the defined benefit plan, a mandatory one percent into the defined contribution plan, and an additional four percent of elective deferments into the defined contribution account. Employer contributions would vest at the same rate as the vesting schedule outlined in the HB 2410, where employees would be 100 percent vested after their first five years. In total, if the employee deferred enough to reach the employer match, a total of 8.5 percent of salary (5 percent from the employee and 3.5 percent from the employer) would be directed into his or her defined contribution account annually.

To reduce the State's cost, reduced cost-of-living adjustment (COLA) provisions offered in the defined benefit component and a lengthened period used to calculate an employee's average final compensation (AFC) calculation could be instituted, as has been done for Plan 2 employees. Under this combination plan, the State would provide 100 percent of the first two percent increase in the consumer price index (CPI), and half of each one percent increase from two percent to four percent, for a maximum COLA of three percent per year. Instead of using the highest consecutive 36 months of an employee's salary to calculate the benefit amount, the defined benefit component would be based on an AFC period of 60 months.

Even if employees deferred only five percent of their salary, employees with salaries at or below $60,000 at retirement could meet the target income replacements.

Combination Plan Could Provide Adequate Income Replacement Even if Employees Save at Minimum Rates. With the provisions that would be offered in this optional combination plan, employees at each income level used to measure income replacement could potentially exceed the income replacement targets if they could defer five percent of their salary to their retirement account in addition to the four percent required to the defined benefit portion, for a total of nine percent throughout their career (Figure 17). As discussed earlier in this chapter, however, a nine percent deferment level appears to be unlikely for most employees, given relatively low average salaries. Therefore, the maximum scenario is unlikely. However, even if employees deferred only five percent of their salary, which is the current rate at which State employees must contribute to the existing defined benefit plan, those with salaries at or below $60,000 at retirement could meet the target income replacements.

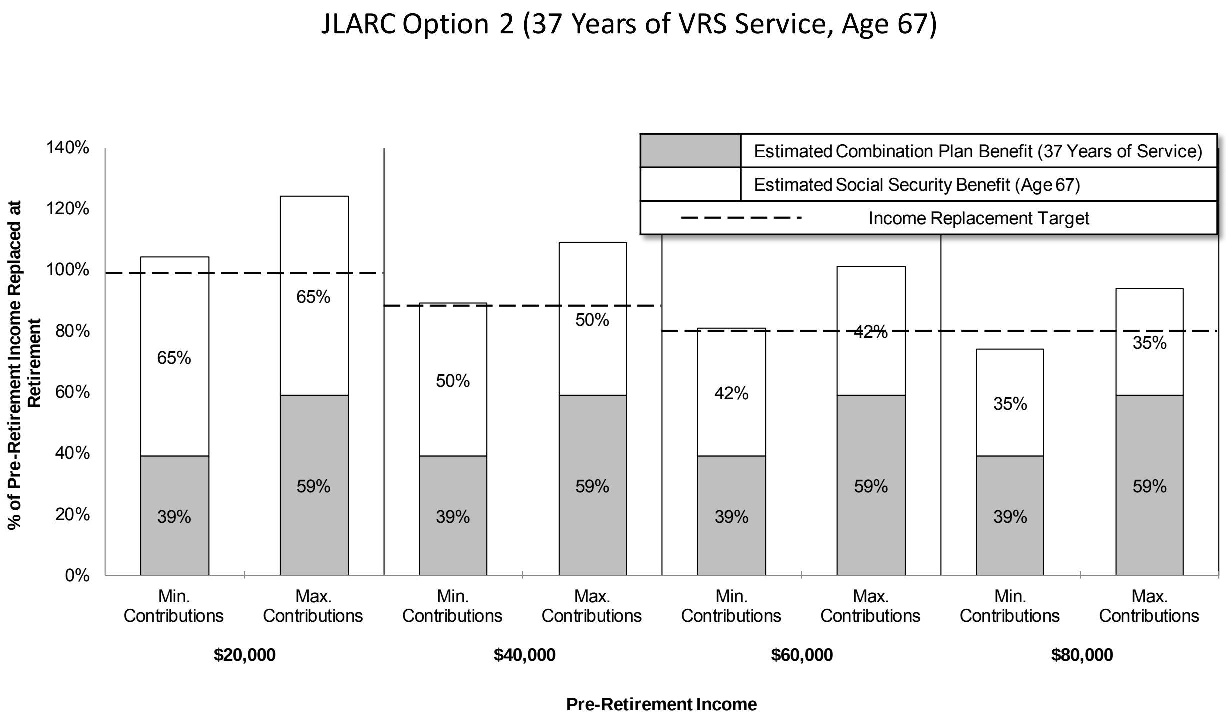
As mentioned for the income replacement analyses for HB 2410, because the employee will be bearing a greater share of the risks of investing, actual income replacement at retirement would depend on how much an individual is willing or able to save for retirement each year and on the performance of his or her investments. However, with this option, at least a portion of his or her retirement income would be guaranteed by the State. In the case of a retiree with 37 years of service, he or she will be guaranteed 37 percent of average final compensation at retirement through the defined benefit component, not including Social Security.

As mentioned in the analysis of HB 2410's income replacement potential, the average employee retiring from the State in 2011 retired with only 23.3 years of VRS-covered service. Therefore, the benefits presented in Figure 17 should not be interpreted as the benefits most employees would actually receive through the combination plan. For example, an individual making $40,000 who retires after a 30-year career is projected to have income from the combination plan that is between seven percentage points below and six percentage points above Mercer's recommended target income replacement rates, depending on consistent total employee contributions into the combination plan of five or nine percent, respectively.

Thirty-seven years of service was chosen to analyze the potential adequacy of the combination plan's benefit for an employee who works a full career (or close to a full career) under a VRS-covered position. It is reasonable to expect that employees who work less than a full career with the State would have retirement savings they have accrued while working outside the VRS system to cover any gap between the combination of the VRS benefit and Social Security benefit and the individual's recommended income replacement targets.

Finally, as noted in the HB 2410 income replacement, an employee who retires prior to Social Security eligibility will replace less income at retirement. For example, depending on consistent employee contributions of five percent or nine percent of salary, an individual in the combination plan making $40,000 prior to retirement who retires at age 60 with 30 years of service would initially only replace between 31 and 44 percent of his or her pre-retirement income. These replacement figures are between 57 and 44 percent below Mercer's recommended targets for an individual with a $40,000 pre-retirement salary. Although Social Security would eventually increase this individual's income replacement rate, it would not be as high as it is in the 67/37 scenario because the benefit would be based on fewer years of service and fewer years of contributions to the defined contribution component.

Figure 17: At Age 67 With 37 Years of Service and With Unreduced Social Security, Most Combination Plan Participants Could Reach Income Replacement Targets



Note: Figure assumes four percent pre-retirement investment returns and the individual purchases an annuity with four percent investment returns and 2.5 percent benefit increases. It is likely that an individual would not purchase an annuity with a defined contribution account balance that includes 2.5 percent increases. However, this assumption was made so that the defined contribution annuity could be comparable to the current retirement plan annuity.

Source: JLARC staff and Mercer analysis of income replacement data for the combination plan and of Social Security benefits.

Combination Plan Could Have a Positive Impact on Employee Recruitment, but Would Not Help With Retention as Much as the Existing Defined Benefit Plan. Although portability would not be as high as it would be in HB 2410, the combination plan would provide a more portable account balance than the current defined benefit plan. As a result, it would be more attractive to short-service employees than the current defined benefit plan. Unlike the plan outlined in HB 2410, Mercer expects the combination plan would be attractive to not only early-career short-service employees, but also mid- and late-career prospective employees, because of its defined benefit component. However, Mercer notes that mid- and late-career hires are likely to prefer the existing defined benefit plan to this combination option.

The defined contribution provisions of the combination plan would offer a similar match to the State's peer group used in Mercer's total compensation analysis. Therefore, with the inclusion of the defined benefit component, the combination plan would be an attractive retirement package relative to the State's peers.

The retention effect of the combination plan is unlikely to be as strong as the current defined benefit plan, but, because it includes a defined benefit component, the combination plan would likely have a stronger positive impact on employee retention than HB 2410.

Employees surveyed and interviewed for this study indicated a higher level of interest in participating in the combination plan, as compared to a pure defined contribution plan. As mentioned earlier, 17 percent of new State employee hires said they "probably" or "definitely" would switch to a combination plan if given the option, compared to nine percent with respect to an optional defined contribution plan. An additional 41 percent of new hires said they "might" switch to a combination plan, compared to an additional 38 percent who "might" switch to a defined contribution plan.

Combination Plan Could Decrease Costs of Retirement Benefits for General State Employees and Teachers by Less Than One Percent Through FY 2022. The VRS actuary analyzed the cost impact of implementing a retirement plan designed like this combination plan. The plan would be optional for newly hired as well as existing employees. The actuary used the same assumptions about election rates for this analysis as in the analysis of HB 2410.

According to the VRS actuary, the combination plan could result in lower contributions being required for general State employees' retirement benefits. Estimated cost reductions to the State range from $5.6 to $118.7 million in total contributions for general State employees through FY 2022. This amounts to between 0.08 and 1.66 percent of the cumulative contributions that would be otherwise expected through FY 2022.

The high savings estimate ($118.7 million) assumes a participation rate of 20 percent by newly hired and nonvested existing employees and a minimum employer match for all plan participants (one percent). The low savings estimate ($5.6 million) assumes a lower participation rate (five percent) and a maximum employer match for all plan participants of 3.5 percent of salary.

For teachers' retirement benefits, with high participation (20 percent) and a maximum employer match paid to all employees of 3.5 percent of salary, the combination plan could cost the State an additional $66.6 million cumulatively through FY 2022. However, with high participation rates and a minimum employer match of one percent of salary, costs could be reduced by up to $101.3 million through FY 2022. The $66.6 million in additional contributions would represent approximately 0.42 percent of the projected cumulative contributions that are expected for the teachers' plan through FY 2022, and the $101.3 million in cost reductions would represent a 0.65 percent decrease in cumulative costs through this period for this plan.

In aggregate, if offered to both State employees and teachers, the VRS actuary estimates that the combination plan could be expected to result in between $61 million in additional costs to $220 million in cost reductions, cumulatively through FY 2022, depending on participation rates and employee-elective contribution rates to the defined contribution portion. The $61 million in additional costs would represent an increase in costs of 0.27 percent of the expected total contributions for these two plans through FY 2022, while the $220 million in reductions would represent 0.96 percent of the expected total contributions for these two plans during this same period.

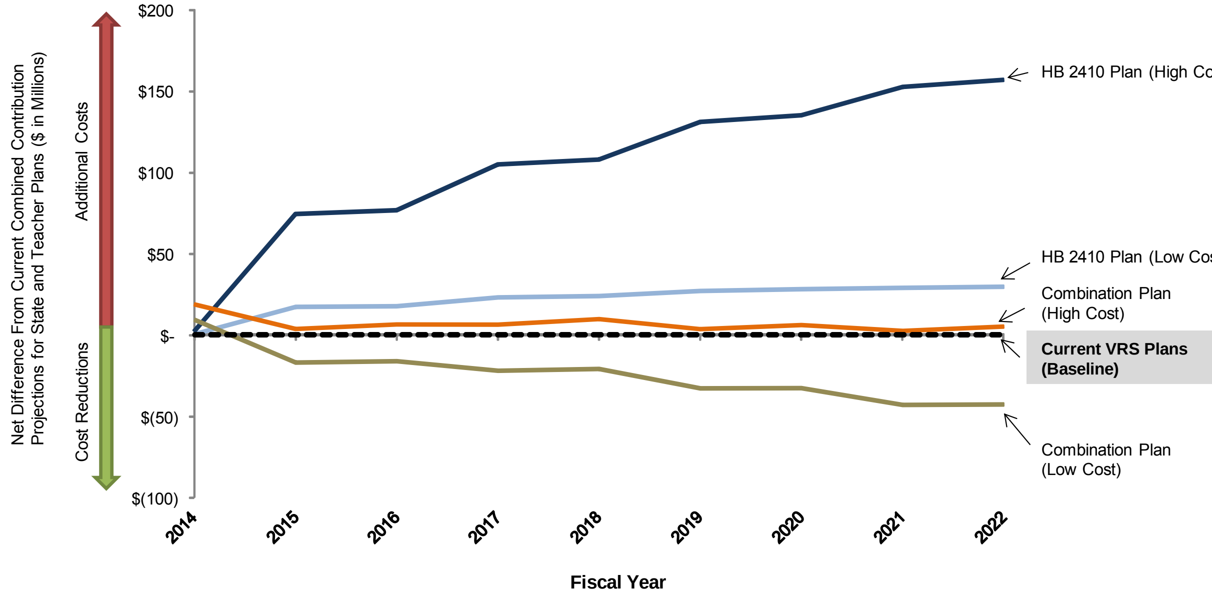
Normal Cost

The normal cost is the actuarial present value of benefits accrued each year. The normal cost and any costs associated with paying off existing unfunded liabilities constitute the annual required contribution.

The actuary's analysis projects that in the first year of implementation the combination retirement plan would result in added costs of between $2.4 and $26.2 million if it were offered as an option to general State employees and teachers. After the first year, costs to the State would begin to decrease because the normal cost of the benefit would be lower and because four percent member contributions would still be directed into the trust fund to help pay for the normal costs and existing unfunded liabilities. The lower benefit costs are primarily a result of a lower benefit multiplier and a COLA provision that is less valuable than offered in the existing defined benefit plans. Because four percent of salary would be directed into the trust fund, a surcharge would not be needed.

Figure 18 illustrates the cost reduction potential of both plans analyzed by the VRS actuary through FY 2022 compared to contribution projections for the current plans for State employees and teachers. In this analysis, it is assumed that only one of the alternative plans is implemented and that it is an optional alternative to the existing defined benefit plans. Table 15 provides a more detailed comparison.

Figure 18: Optional Alternative Plans Could Result in Additional Costs



Note: All figures are compared to the baseline cost projections, which are the annual expected combined costs of the current State employees' and teachers' defined benefit plans between FY 2014 and FY 2022. Figures assume alternative plan is offered to both groups as an optional alternative to the defined benefit plan and that no other alternative plan is offered concurrently.

Source: JLARC staff analysis of data provided by the VRS actuary.

Table 15: An Optional Alternative Plan Could Result in Higher Costs (Through FY 2022, $ in Millions)

	HB 2410		Combination Plan	
	Low Cost Estimate	High Cost Estimate	Low Cost Estimate	High Cost Estimate
Plan	**$ Cost Impact Through FY 2022**	**$ Cost Impact Through FY 2022**	**$ Cost Impact Through FY 2022**	**$ Cost Impact Through FY 2022**
State	$66.1	$324.1	($118.7)	($5.6)
Teachers	131.1	620.1	(101.3)	66.6
Total	*197.2*	*944.2*	*(220.0)*	*61.0*

Note: Figures in parentheses indicate cost reductions. All figures are compared to the baseline cost projections, which are the cumulative expected costs of the State employees' and teachers' defined benefit plans through FY 2022. Figures assume alternative plan is implemented as an optional alternative to the defined benefit plan and that no other alternative plan is offered concurrently. Cost figures are cumulative through FY 2022.

Source: JLARC staff analysis of data provided by the VRS actuary.

To Encourage Savings, Alternative Plans Could Include Auto-Escalation Feature for Employee Contributions

While both plans require minimum employee contributions into the employee's defined contribution account, according to experts at Boston College's Center for Retirement Research, "Experience in the private sector suggests that participants tend to stay where they are put." In these two plans, most employees are expected to contribute their initial minimum automatic contributions and are likely to keep their contributions at that level.

To encourage savings and make it more likely that employees achieve an adequate benefit for retirement, in both options, the General Assembly could consider including a provision that increased employee contributions automatically over time to take advantage of the maximum employer match gradually, if the employee has not been already. The employee could opt out of this auto-escalation feature, but such a feature would encourage increased savings as an individual approaches retirement.

Employees Should Be Given at Least One Opportunity to Switch Plans

Given the challenges to ensuring that employees make informed choices regarding their retirement plan options, employees should be given at least one opportunity to reverse their decision within the five-year vesting period. Other states with optional plans provide their employees with such an opportunity. Specifically, four out of the seven states that offer optional alternative plans allow their members to switch at least once after their initial election period has ended. For example, Florida allows employees to switch one time at any point in an employee's career, as long as the individual is still an active employee in the Florida retirement system. Two states allow employees to switch once, but the switch must be made before the employee reaches five years of service. Only Ohio allows its members to switch plans more than one time during their career. Employees in Ohio's public employee retirement system may switch up to three times. Data obtained on the decision reversals of employees in the Florida and Ohio retirement systems shows that only a small fraction of employees have exercised this option.

There would be fiscal implications of allowing employees to reverse their decisions, particularly if they are permitted to leave the defined benefit plan and join a defined contribution plan. To minimize the fiscal impact, employees switching to a defined contribution plan could be permitted to transfer only their employee contributions plus interest into the defined contribution plan, and employees switching to the defined benefit plan would only be able to purchase actuarially equivalent service with their defined contribution account balances.

BECAUSE OF THE GREATER RISKS TO EMPLOYEES IN AN ALTERNATIVE RETIREMENT PLAN, STATE SHOULD TAKE STEPS TO EDUCATE EMPLOYEES AND ENSURE ADEQUATE INVESTMENT OPTIONS

If the State views high participation in a defined contribution or combination plan as advantageous, then a significant statewide effort will need to be made to provide employees with an education program to allow them to make informed decisions about their retirement plans and the necessity of consistently contributing increasing amounts to their retirement accounts. The diversity of the State and local workforce in terms of education and literacy levels, income levels, and personal circumstances will present challenges to providing an effective education program. Therefore, education efforts should also be paired with ensuring that employees have investment options that are understandable and easily managed.

Successful Retirement Planning Education Will Require State to Invest Both Time and Resources

As mentioned previously, the majority (89 percent) of respondents to JLARC staff's survey of State employees reported they would need at least some guidance in deciding how to invest their retirement funds. Similar concerns were raised during group interview sessions with State and local employees. Numerous employees said that education and investment training would need to be a significant component of the introduction of any plan that shifted investment risks to the employees. Several participants in employee group interviews observed that this education should be ongoing and be presented in various written and audio-visual formats.

Without a significant education effort, agency human resource managers, VRS staff, and retirement plan administrators in other states predict that employees will only contribute the minimum amount necessary to their accounts and will invest too conservatively to earn an adequate retirement benefit. This prediction is consistent with the literature on defined contribution plan participation. Still, while employers—including other states—have recently begun to undertake efforts to improve employees' successful participation in defined contribution plans, balances in these accounts remain low, as discussed in earlier in the chapter.

According to State agency human resource managers, a substantial number of employees in some agencies will be difficult to educate, due primarily to the nature of their job which requires them to be away from a traditional office-based setting. Employees in these non-office settings are typically difficult to communicate with because they do not have regular access to email or the Internet to access human resources communications. This concern was voiced by human resource staff for three of the State's largest agencies: the Department of Behavioral Health and Disability Services (DBHDS), the Department of Corrections, and the Department of Transportation. These agencies operate in a relatively decentralized fashion and employ a substantial number of non-office based workers. According to human resource staff for DBHDS, as much as one-third of that agency's employees would be a challenge to educate about retirement planning in general or defined contribution plan participation specifically.

A challenge for the more decentralized agencies that employ large segments of the State workforce throughout the Commonwealth is not just communicating with the employees, but ensuring that the respective human resource representatives situated throughout the State have the resources and knowledge to communicate information in a timely and effective manner. This is a challenge that other states have experienced. According to a representative from the Colorado Public Employees' Retirement System, the fact that the state is ultimately relying on the agencies to provide retirement plan education to newly hired staff in such a geographically diverse state is a challenge. The effectiveness and quality of agencies' efforts varies and, according to this official, is a weakness in the approach.

Efforts to educate the large number of existing and newly hired employees that could be given the option to participate in a defined contribution or combination plan as their core retirement plan will require significant time and resources. In Florida, a 0.5 percent charge is levied against all participating employers' total retirement system payroll and is used to cover the cost of the state's MyFRS Financial Guidance Program, which is the education program for both the pension plan and the defined contribution plan, and for the administration of the defined contribution plan. According to Florida officials, the cost of the guidance program has been approximately $12.9 million per year since FY 2002-03, and the cost of the administration of Florida's defined contribution plan has been approximately $4.2 million per year during the same period.

In order to ensure that the Commonwealth's program for educating potential defined contribution plan participants is effective, the General Assembly may wish to give VRS, in partnership with the Department of Human Resource Management and State agencies, between 12 and 18 months to develop and implement a broad-based education effort prior to accepting enrollment in an alternative retirement plan.

Investment Platform Should Be Structured to Encourage Participation by Employees Who Exhibit Range of Investment Abilities

JLARC staff were asked to address the question, "For retirement plans that include funds managed by employees, what are the most suitable investment and management structures?" JLARC staff had Mercer address this question as part of their analysis for this project. Mercer concluded that

> the program should be designed to be easily utilized by both confident investors with significant investment experience and those that are inexperienced and need support in determining appropriate investments to meet their retirement goals.

Mercer identified three key elements of an appropriate investment structure. These include a limited number of asset classes and funds, asset classes and funds that provide options for inexperienced as well as experienced investors, and an administrative structure that is managed by a single vendor, such as the administrative structure currently used for the State's optional supplemental defined contribution plan, referred to as the deferred compensation plan.

A key consideration in developing the investment structure for a defined contribution plan that is intended to be a primary retirement plan is the array of investment options that participants will be able to choose from. This would be necessary in either a combination plan, which has a defined contribution component, or a pure defined contribution plan. According to Mercer,

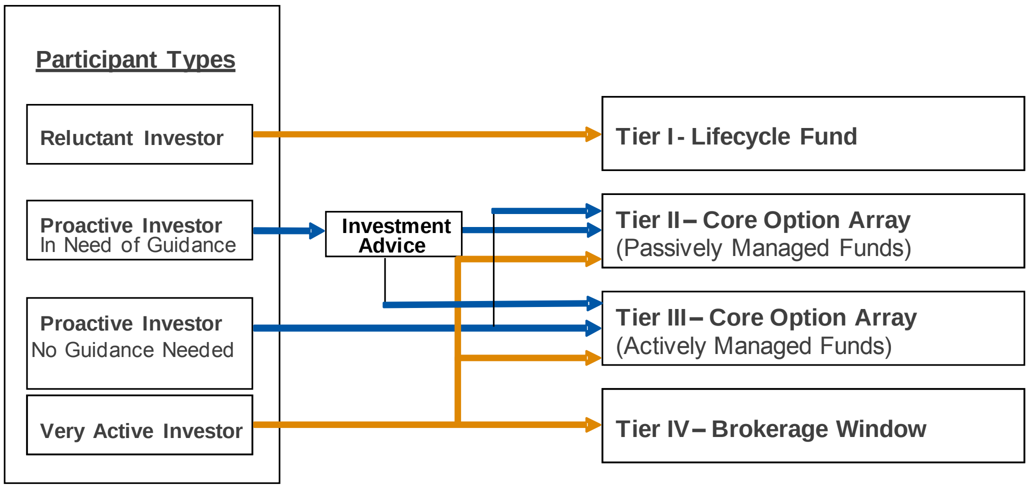
> defined contribution investment structures should be designed so that investors of all levels have appropriate models to utilize and access to appropriate resources to assist in developing appropriate asset allocation for their risk tolerance.

However, behavioral finance literature suggests that providing investors with too many options is counterproductive. Mercer therefore recommends that the investment options be "streamlined" and that they be grouped into between two and four different tiers. Mercer recommends

> a multi-tiered approach. Depending on the participants' degree of investment sophistication and the desired level of complexity in the particular investment program, offering between two and four tiers is appropriate.

Figure 19 is Mercer's illustration of a four-tier investment platform. Mercer's recommendation is to ensure that there are suitable options for four categories of investors: the "reluctant" investor, the "proactive" investor who is in need of some investment guidance, the "proactive" investor who is not in need of guidance, and the "very active" investor.

Figure 19: Example of Tiered Investment Structure



Source: Mercer working paper on investment and management structures of a defined contribution plan, 2011.

Table 16 provides more detailed descriptions of the four tiers shown in the figure. Essentially, the investment options range from "lifecycle" funds for the reluctant investor to both passively and actively managed funds for the proactive investor, to a "brokerage window" for the very active investor that provides for maximum choices. However, Mercer also states that "the use of a brokerage account may not be necessary to meet the investment goals of this program."

In each tier, the State could offer participants a choice of multiple asset classes, such as fixed income or equity. However, Mercer recommends that only one fund be offered for each asset class. In total, Mercer recommends that no more than 20 total fund options be offered across the entire platform. Mercer also commented on funds that would specifically not be appropriate for a primary retirement plan's investment platform. Mercer stated that "non-appropriate defined contribution investments are those funds that expose investors to extreme volatility, and hence the opportunity for portfolio losses," and cited non-diversified sector funds (such as technology and healthcare), funds with a very narrow object (such as gold), or funds that may be too risky (such as non-diversified hedge funds) as examples.

Table 16: Description of Suitable Tiers in a Primary Defined Contribution Retirement Plan

Tiers	Investor Type	Description	Considerations
1	Reluctant Investor	Lifecycle funds for participants lacking time/ability to construct a customized portfolio	Simplicity is key to encouraging participation in a primary defined contribution plan. Could be made the default investment option – several states contacted by JLARC staff allow for default into lifecycle funds.
2	Proactive Investor (in need of guidance)	Array of three to four *passively* managed options at low cost	Appropriate for participants wanting to build own portfolio
3	Proactive Investor (no guidance)	Array of *actively* managed options across the risk spectrum	Appropriate for participants wanting to build own portfolio
4	Very Active Investor	Brokerage window	Provides for maximum choices, but may not be appropriate for a primary retirement plan

Source: Mercer working paper on investment and management structures of a defined contribution plan, 2011.

Finally, Mercer recommends that the administration of the defined contribution plan be limited to a single vendor for simplicity and for cost efficiency. This is the administrative structure used for the State's deferred compensation plan. Officials from South Carolina's retirement system who were interviewed by JLARC staff also echoed this recommendation.

The VRS Board of Trustees has recently undertaken a review of the investment options that participants have in the State's deferred compensation plan. The objectives of this review are to simplify the investment choices available to participants, thereby improving participation levels, and helping participants better align their investment and retirement goals with their actual portfolios. One of the more significant changes approved by the board thus far is the implementation of lifecycle/target date funds, which will serve as the default option for participants.

Chapter 7

Recommendations for the Retirement Benefits Package for State and Local Employees

In Summary

Several options could be considered by the General Assembly to modify the defined benefit plans, if it wishes to reduce future State costs. Four changes could be made that would modify the manner in which future benefits are calculated, but would not mandate that employees work longer or contribute a greater portion of their salaries to the costs of the benefits. The General Assembly could also introduce an alternative retirement plan to provide employees with greater choice and portability and reduce the State's obligation to provide a guaranteed lifetime retirement benefit to employees. Either a defined contribution or a combination plan would offer advantages, depending on the objectives of implementing an alternative plan. A defined contribution plan could be more effective at recruiting individuals who intend to have relatively short tenures as State employees and would be more effective at reducing the State's future benefit obligations. However, employees have expressed a greater degree of interest in a combination plan, which is more likely to reduce the State's costs over the next ten years than a defined contribution plan.

This review focused on the effectiveness of the core defined benefit retirement plans provided to State and local employees through the Virginia Retirement System (VRS). (Ancillary benefits such as disability benefits or retiree health insurance benefits were not a part of this review.) As discussed in Chapters 2 and 3, the current defined benefit plans meet relevant goals.

However, there is a desire to reduce the defined benefit plans' ongoing costs to the State and local governments, which have been increasing. Should the State wish to modify the defined benefit plans in order to reduce future costs, this chapter provides a recommendation for what modifications should be considered.

Additionally, this review found that some employees desire greater flexibility and portability in their retirement benefits and that providing employees with an alternative type of plan would address these employees' preferences. An alternative plan, whether a defined contribution or a combination plan, would also reduce State and local governments' future benefit obligations. This chapter provides a recommendation pertaining to the key elements of an alternative plan, should the General Assembly wish to implement one in the future. Because of the level of existing unfunded liabilities in the defined benefit plan, limited interest by employees in an alternative plan, and the level of education and guidance of employees that will be necessary, another plan should not be introduced with an expectation that significant cost savings will accrue to the State.

PLAN DESIGN MODIFICATIONS WILL NOT ELIMINATE STATE'S CURRENT LIABILITIES AND ADDITIONAL RESOURCES WILL NEED TO BE COMMITTED TO TRUST FUNDS

Implementing defined benefit plan modifications or an alternative retirement plan would result in reducing the State's future retirement plan costs. However, these reductions would be made on the "normal cost" of the retirement plans – the costs for the benefits earned in a given year under the new provisions. These cost savings would not reduce the existing unfunded liabilities that have developed for each of the five State-supported plans.

Without sustained progress on extinguishing the existing unfunded liabilities, these liabilities will be perpetuated and could increase. In order to reduce the existing liabilities, additional resources should be committed to the retirement system's trust funds.

The three primary sources for paying for this portion of the plans' annual costs are investment returns and employer and employee contributions. While investment returns are likely to contribute the greatest amount toward reducing the plans' unfunded liabilities, the VRS Board of Trustees has signaled that it expects less of the ongoing costs of the retirement programs to be paid for by investment returns. Therefore, developing and implementing a strategy to fully fund the employer contribution – including the existing unfunded liabilities – would represent a positive step by the General Assembly and the Governor toward improving the financial condition of the plans.

Developing and implementing a strategy to fully fund the employer contribution would represent a positive step toward improving the financial condition of the plans.

FOUR MODIFICATIONS TO THE DEFINED BENEFIT PLANS FOR STATE AND LOCAL EMPLOYEES COULD BE CONSIDERED

Modifications to the defined benefit plans' provisions would reduce future benefit obligations, but some negative impacts should be anticipated if changes are implemented. As discussed throughout this report, significant changes to the benefits package that the State offers to its employees are likely to further reduce its competitiveness as an employer and could therefore reduce the quality of services State and local agencies provide to residents of the Commonwealth. This is particularly true if benefit reductions are made without offsetting increases in other elements of compensation, such as salary. As described in Chapter 2, the State's cash compensation is well below Mercer's assessment of what is considered competitive in the marketplace and contributes to Mercer's finding that the State ranks last as an employer behind the 15 competitor organizations it analyzed.

Modifications to the defined benefit plans could also result in employees needing to work longer or to increase their other retirement savings in order to reach their retirement goals. Therefore, if the General Assembly modifies the existing defined benefit plans, the State and local governments will need to increase their efforts to educate existing and newly hired employees about the importance of retirement planning and the need for resources in addition to the VRS benefits.

Additionally, modifications that apply to existing employees could have moderate to substantial negative impacts on retention. Employees within five years of eligibility for full retirement benefits could be exempted from such changes in order to avoid a sharp increase in the number of more senior, experienced employees who may decide to retire before the changes are implemented.

Four Changes Could Be Made That Would Reduce Future Costs and Have a Minimal to Moderate Impact on the State's Goals

Should the General Assembly wish to modify the defined benefit plans, it may wish to consider modifying four components of the plans:

(1) For existing employees, the calculation of average final compensation (AFC) could be made over 60 months versus 36. This provision is already in effect for employees hired on or after July 1, 2010. Techniques could be applied to preserve benefits already accrued by those employees not already under this provision.

(2) For newly hired and existing employees, future cost of living adjustments (COLAs) could be granted based on a formula that provides retirees with an increase in their benefit of the first full two percent increase in the Consumer Price Index (CPI), and then half of each percent increase in the CPI from two to four percent, for a maximum COLA of three percent.

(3) For newly hired and existing employees who choose to retire early and qualify for a reduced benefit, the COLA could be deferred until they reach the age at which they would have been eligible for an unreduced benefit.

(4) For newly hired employees only, future retirement benefits could be calculated based on 1.6 percent of AFC, versus 1.7 percent.

Modifying one or more of these plan elements would change the factors upon which employees' future retirement benefits are calculated, but would not mandate that employees work longer or contribute additional amounts to the costs of their benefits. For most employees, these changes would not substantially impact employees' ability to retire at an appropriate time and with adequate income, although these changes would have a greater impact on lower salaried employees who may be less able to supplement their future VRS benefits with other savings.

According to Mercer, if one or more of these modifications are made, the retirement plans themselves would remain competitive relative to the Commonwealth's competitors. These changes would, however, adversely impact the competitiveness of the State's total compensation package, particularly if other areas of compensation, such as salary, are not adjusted. Some negative impacts should be expected, therefore, particularly with respect to retention, even if longer-tenured employees are exempted. Table 17 summarizes the projected impact of this proposal on the goals of the retirement plans.

Recommendation (4). If the General Assembly wishes to further reduce the costs of the defined benefit retirement system, it may wish to consider one or more of the following four modifications to the existing plans for State and local employees. The General Assembly may wish to (i) base all future retirees' benefits on an average final compensation of employees' 60 highest consecutive months of salary; (ii) revise the calculation of the cost of living adjustment (COLA) so that payments would increase by 100 percent of the first two percent in the Consumer Price Index (CPI), and by half of each percent increase in CPI from two to four percent, for a maximum COLA of three percent, for newly hired and existing employees; (iii) defer the COLA applied to the benefit payments for employees who retire with a reduced benefit amount until they reach the age at which they would have been eligible for an unreduced benefit, for newly hired and current employees; and (iv) change the benefit multiplier to 1.6 percent of average final compensation for new employees hired into the general State employees', teachers', and general employee political subdivision plans. Changes that apply to existing employees should exempt employees within five years of eligibility for an unreduced retirement benefit.

Table 17: Overall Impact of Four Modifications on Retirement Plan Purposes

Purpose	Existing Employees	Future Hires (Short-Term Employees)	Future Hires (Long-Term Employees)
Recruitment	N/A	None	Minimal
Retention	Minimal to Moderate	None	None
Retirement	Minimal	None	Minimal to Moderate

Source: JLARC staff analysis.

Four Modifications Together Could Achieve Cumulative Cost Reduction of $1 Billion Over Ten Years

The four defined benefit plan modifications included in Recommendation 4 would result in lower contribution rates being required by the State and local governments. For the State-supported plans, all four would result in annual required contributions being an estimated $147 million less by FY 2022. Cumulatively through FY 2022, required contributions are estimated to be approximately $1 billion less if all four modifications were made and were effective July 1, 2012. Savings would begin to accrue in FY 2015, which is the first year for which the VRS actuary would calculate new rates after the changes are implemented. Table 18 summarizes the cost impact of these changes for the five State-supported plans.

Table 18: Estimated Cost Reductions of Defined Benefit Modifications ($ millions)

Component	FY 2015 Reduction	FY 2022 Reduction	Cumulative Reduction
60-month AFC	$56.4	$69.0	$509.5
Deferred COLA	$45.0	$61.6	$430.4
3% COLA	$41.7	$49.8	$369.3
1.6% multiplier	$5.0	$36.7	$165.5
Total	*$113.7*	*$147.0*	*$1,064.9*

Note: Total cost reduction reflects the total impact if all four options were implemented together, which is less than the sum of each independent impact because of the interactions between the options if they are implemented together. Cost reductions do not reflect the present value of savings and assume three percent annual inflation. Cost reductions are inclusive of both general and non-general funds.

Source: JLARC staff analysis.

IF DEFINED BENEFIT MODIFICATIONS ARE DESIRED, SOME CHANGES ARE NOT RECOMMENDED AT THIS TIME

Some of the options described in Chapter 5 are not recommended at this time. These include increasing the age at which hazardous duty plan members become eligible for full retirement benefits and increasing required employee contributions either for general employees or for members of the hazardous duty plans.

Recent changes made to the retirement plans did not increase the age and years of service required of hazardous duty employees to become eligible for full retirement benefits. Chapter 5 discussed an option that would lengthen the age for full benefits from 50 to 55 for these employees. The impacts of this change on these employees' ability to retire at an appropriate time would be minimal because they already tend to work past age 50. However, the VRS actuary projects that the State's cost reductions under this option would be low ($8 million in 20 to 30 years). Because these cost savings could be outweighed by the administrative impacts of creating a new tier of benefits for these employees, this option is not recommended at this time.

Increasing required employee contributions is also not recommended at this time. It is reasonable to expect employees to bear some portion of the cost of their benefits, and at least half of State employee survey respondents agreed that the current contribution level is appropriate. However, requiring greater employee contributions before the State has made progress toward paying the full employer contribution would be viewed by employees as unreasonable and would not necessarily result in greater total resources being committed to the funds. Additionally, higher contributions would result in salary reductions for employees that may not be affordable for some and could place the State out of the range of competitiveness in terms of its compensation package.

IF THE GENERAL ASSEMBLY WISHES TO IMPLEMENT AN ALTERNATIVE TYPE OF RETIREMENT PLAN, EITHER A DEFINED CONTRIBUTION PLAN OR A COMBINATION PLAN WOULD OFFER ADVANTAGES

Chapter 6 described two different retirement plans—a defined contribution plan and a combination plan—that the General Assembly could consider offering to employees as an optional alternative to the existing defined benefit plans. Both of the plans could

- provide employees with greater portability of their benefits,
- allow employees to achieve adequate income replacement,
- improve the State's ability to recruit employees who intend to have shorter tenures in State or local government employment,
- provide more stability to State and local government budgeting for retirement plan costs, and
- reduce State and local governments' future obligations for providing a guaranteed lifetime benefit and increase employee responsibility for retirement security.

Table 19 evaluates the plans against various objectives related to the State's public sector workforce.

Alternative Plan Advantages Depend on State's Recruitment Goals

If the General Assembly wishes to introduce an alternative plan as an option for employees, participation rates in the plan should be a consideration because they will affect the plan's cost effectiveness. As discussed in Chapter 6, it appears that a greater number of

Table 19: Comparison of the Two Alternative Retirement Plans

Possible Objectives	Defined Contribution Plan	Combination Plan
Reduction of government's future benefit obligations	✓+	✓
Increased employee responsibility for future retirement security	✓+	✓
Reduction in government's near-term costs	X	✓
Reduction in government's long-term costs	✓	✓
Increased benefit portability	✓+	✓
Recruitment of short-term employees	✓+	✓
Recruitment of long-term employees early in their careers	X	✓
Recruitment of long-term employees later in their careers	X	✓+
Retention of employees in the workforce	X	✓+
Provision of a benefit that allows most employees to retire with adequate income	X	✓+

Key: ✓+ = Very effective ✓= Effective X = Ineffective

Source: JLARC staff analysis.

employees would select the combination plan over the defined benefit plan than a defined contribution plan.

A defined contribution plan may, however, be more effective at attracting certain types of employees to State or local government employment. Because of the portability of employees' savings in a defined contribution plan, this type of plan could improve the State's ability to attract more employees who do not intend to remain with the State for a full career. For example, the spouse of a member of the U.S. military who has been stationed temporarily in Virginia may be more likely to consider public sector employment while in Virginia if a defined contribution plan were available. Of those employees responding to the JLARC staff survey who stated that they do not plan to work for the State long enough to collect VRS benefits, 20 percent stated that they would "probably" or "definitely" switch to a defined contribution plan if one were offered. According to the survey of human resource managers, of those who reported current difficulties with recruiting new employees, 32 percent said that an alternative plan would help address this problem.

Still, a combination plan could help the State's recruitment goals more than a defined contribution plan because employees who think that they will not remain employed with the State (or a VRS-participating local government) for a career, but are uncertain, may find the blend of greater portability and future benefit guarantee attractive. Additionally, according to Mercer, a combination plan is more likely to be attractive to employees who are changing employers later in their careers because they will have some guaranteed benefit in addition to a defined contribution component into which they could transfer savings from previous employers' retirement plans.

Likelihood of Employees Being Able to Retire Under an Alternative Plan Should Be a Consideration

Employees' ability to retire under the plan should also be a consideration because an effective and efficient workforce is an important element in the quality of services the State delivers to the public. Employees are more likely to achieve an adequate retirement benefit under the combination plan than the defined contribution plan. Mercer's calculation of the potential income replacement provided by this plan, when combined with Social Security, is that it would allow most employees to reach recommended income replacement targets. This would be true even if employees are only able to contribute the minimum amount of five percent to the costs of the plan (four percent mandatory to the defined benefit portion and one percent mandatory to the defined contribution portion). Still, while the combination plan results in employees bearing greater responsibility for their future retirement security than is the case in the defined benefit plan, employees would bear an even greater share of responsibility under the defined contribution plan.

Being able to retire is particularly important for the State's hazardous duty employees—local hazardous duty employees as well as State employees in the State Police Officers Retirement System (SPORS) and Virginia Law Officers Retirement System (VaLORS) plans. Because of their shorter average careers, these employees are unlikely to be able to accrue a sufficient benefit under an alternative plan that depends on savings accumulating over a career. In the case of VaLORS, their lower average salaries indicate that they will be unable to contribute a sufficient amount to their accounts. Similar concerns were expressed by representatives of the SPORS plan, although their salaries are higher, on average, than VaLORS members. The General Assembly may therefore wish to offer an alternative plan only to members of the State employees' plan, the teachers' plan, and non-hazardous duty local plans.

If an alternative plan were offered to hazardous duty employees, to ensure that the employer match rate is equal in proportion to the match rate provided to members of the other plans, the General Assembly may wish to consider providing a higher match rate for a plan offered to SPORS and VaLORS members. Higher contributions and match rates would also be consistent with these employees' need to retire earlier than most general employees. Additionally, the General Assembly could provide a higher benefit multiplier in the defined benefit portion of a combination plan, if a combination plan is implemented.

Impact of an Alternative Plan on the Financial Status of the Defined Benefit Plan and the State's Future Costs Should Be a Consideration

Providing employees a choice to participate in a defined contribution plan will reduce the payroll base upon which the defined benefit plan contributions are calculated. This will result in fewer resources flowing into the existing VRS trust funds to pay for the unfunded liabilities, which would trigger an increase in the contributions needed to pay for the existing liabilities.

Because the unfunded liabilities must be paid, the General Assembly has two options. The first option is to increase the contributions needed from the defined benefit plans' payroll base to pay for the existing liabilities. This would result in the State paying a higher per-employee cost for those employees who choose the defined benefit plan over the defined contribution plan. The second option, as described in Chapter 6, would be for the defined contribution plan to incorporate a "surcharge" which would be paid by the State per employee, no matter which plan they choose. This surcharge would be the difference between the cost to the State of its match into the defined contribution plan for an individual employee and the employer contribution needed for the defined benefit plan's ongoing costs. A surcharge that is spread across the entire payroll removes any incentive for employers to direct new employees into the defined contribution plan under which the employer's costs would be lower without the surcharge.

The State's costs are expected to increase with the surcharge because the surcharge will need to range from 4.5 to 8 percent of payroll to be sufficient to pay for the unfunded liabilities in the defined benefit plans. (Higher participation rates in the defined contribution plan would result in higher surcharge amounts because of the decline in the number of new employees enrolling in the defined benefit plan.) In the absence of the existing unfunded liabilities, the State's costs for a defined contribution plan would be limited to the amount it would contribute to employees' accounts.

House Bill 2410 (2011) included such a mechanism, and other states have adopted such a policy. This "surcharge" would not be necessary for a combination plan because the existing defined benefit plan would be used as the defined benefit portion of the combination plan, albeit with different benefit provisions.

Defined Contribution Plan Would Provide Greatest Reduction in State's Future Benefit Obligations, but Would Result in Net Cost Increases Over at Least Ten Years

As described in Chapter 6, because of the level of existing unfunded liabilities in the defined benefit plans that must be paid, implementing a defined contribution plan could result in cost increases to the State from between $197 million and $944 million for the State employees' and teachers' plans cumulatively through FY 2022. If implemented for State employees and teachers, the impact of the combination plan on contributions could range from a reduction of $220 million through FY 2022 to an increase of $61 million through FY 2022, depending on participation rates and the level of the State's matching contributions.

Still, under a combination plan the State would continue to be responsible for future guaranteed lifetime retirement benefits. Under a defined contribution plan, because there is no guaranteed future lifetime benefit from the State, employees would bear all of the risk of both saving enough to be able to retire and making these savings last throughout retirement. The State would only be responsible for a matching contribution into employees' accounts. However, because the State's contribution would have a direct impact on employees' retirement benefits, the State would have less flexibility than it does now with respect to its annual spending on retirement benefits.

Providing Disability Benefit Could Help Ensure Attractiveness of Alternative Plan

A key feature of the current defined benefit plans for all VRS members is the provision of a disability benefit. The majority of VRS members are covered by a disability retirement benefit that provides a guaranteed benefit amount for life. State employees, however, are covered by a managed disability retirement program—the Virginia Sickness and Disability Program—that provides employees with a portion of their salary for the period of time that they are determined to be unable to perform their job duties. The disability benefits associated with the defined benefit plans are reportedly highly valued by employees, particularly law enforcement officers or employees who are more likely to sustain work-related injuries.

To maintain the competitiveness of the retirement benefits package, the General Assembly could provide a disability benefit in conjunction with an alternative core retirement plan, whether it is a combination plan or a defined contribution plan. House Bill 2410 (2011), which would have introduced an optional defined contribution plan, included a disability benefit. This benefit was similar to the Virginia Sickness and Disability Program provided to most

State employees. To ensure that any alternative plan is attractive to employees—and prevent adverse selection of more costly employees into the defined benefit plan—a similar disability program could be included.

Universities' Experience in Managing Their Own Defined Contribution Plans for Employees Could Be Useful Guide

Four Virginia universities—George Mason University, the University of Virginia, Virginia Commonwealth University, and Virginia Tech—operate defined contribution plans for their faculty members and other staff independently of the State's defined contribution plan for higher education employees. According to representatives from these four universities, operating independently from the State has improved the universities' ability to educate, guide, and otherwise support members of the defined contribution plans. These universities' experience could be useful in crafting a defined contribution plan for other State employees.

These four universities have expressed an interest in enrolling their non-faculty members into their independent defined contribution plans if a statewide defined contribution plan is offered. Under this arrangement, these employees would not have the choice to enroll in a statewide defined contribution plan, if one is implemented. According to representatives from these universities, this would allow the universities to provide more effective education and guidance to a greater number of their employees and avoid the administrative burden of communicating information about more than one type of defined contribution plan to employees.

If a statewide defined contribution plan is implemented, allowing these universities to enroll their general employees in a separate defined contribution plan would reduce participation in the statewide plan, which could increase administrative costs for that plan. This may not be a significant concern if there is relatively high participation in the plan from other segments of the workforce. Additionally, VRS staff expressed concern about the impacts of such an arrangement on the portability between the university-managed plan and the statewide plan. VRS staff also expressed concerns about their ability to ensure compliance with relevant Internal Revenue Service provisions regarding defined contribution plan administration. Additionally, VRS staff reported that being able to effectively manage the coordination of employees' benefits when some of these benefits are managed by VRS and others by the university would be a challenge.

The exact impacts of permitting universities this flexibility are unclear and additional research should be done to more precisely determine the advantages and disadvantages of this approach from both the State's and employees' perspectives. Still, if the General Assembly implements a defined contribution plan as an alternative to the defined benefit plan, including representatives from these universities in discussions about the statewide plan's design and implementation could be beneficial.

IF AN ALTERNATIVE RETIREMENT PLAN IS IMPLEMENTED, IT SHOULD INCLUDE SEVERAL IMPORTANT COMPONENTS

If the General Assembly wishes to implement an alternative type of retirement plan, there are several components that should be included. These components will help ensure that the plan is cost effective, attractive to employees, and is structured so that employees can achieve an adequate retirement income. Table 20 lists the components that should be included in an alternative plan design or its administration.

Table 20: Necessary Components of an Alternative Retirement Plan If Such a Plan Is Desired by the General Assembly

Component	Reason	Relevant Plan Design
Optional alternative to defined benefit	Continued enrollment in defined benefit plan is important for its ongoing financial health, given existing unfunded liabilities that must be paid.	Both
Minimum cost to the employee of the current and new plans should be same	Employees less likely to make choice based on immediate out-of-pocket costs.	Both
Mandatory employee contributions, possibly subject to automatic increases	Adequacy of future benefit depends on level of employee contributions. Requires employee responsibility for some portion of benefits.	Both
Comprehensive and ongoing retirement planning education and guidance	Adequacy of future benefit depends on employees' ability to manage investments, and most employees will require ongoing training and assistance.	Both
Investment platform structured to accommodate range of abilities, should include lifecycle funds	Diverse investment platform improves likelihood of employees' success in alternative plan.	Both
Includes disability benefit	Reduces likelihood of adverse selection into the defined benefit plan and improves alternative plan's attractiveness as compared to defined benefit.	Both
Employees permitted one opportunity to change plans within five years of initial decision	Provisions of either plan could change that would make the alternative more attractive. Employees who elect alternative plan may decide they want longer-term State employment than initially thought. Defined benefit plan members may decide that they would prefer greater control and portability.	Defined Contribution
Includes mechanism to ensure continued funding of defined benefit plans' liabilities	Important for ongoing financial health of defined benefit plan and future costs to State of the defined benefit plan.	Defined Contribution

Source: JLARC staff analysis

Recommendation (5). The General Assembly may wish to adhere to seven guidelines if it wishes to implement a non-defined benefit retirement plan for State and local employees. The first five guidelines would apply to either a combination plan or a defined contribution plan and the last two apply to a defined contribution plan only. The alternative should (i) be optional for newly hired and existing employees, (ii) have a mandatory employee contribution that is equal to the employee's cost in the defined benefit plan, (iii) be accompanied by a comprehensive and ongoing program to educate employees about financial planning for retirement, (iv) be accompanied by an investment platform that provides appropriate investment choices for employees with a range of investment abilities, such as lifecycle funds, (v) provide a benefit for employees who are unable to work due to a disabling condition, (vi) provide employees with one opportunity to change their plan membership within five years, and (vii) include a mechanism to maintain a necessary level of cash flow into the defined benefit plans' trust funds to ensure that existing unfunded liabilities continue to be paid for.

JLARC Recommendations:

Review of Retirement Benefits for State and Local Government Employees

1. The General Assembly may wish to amend the *Code of Virginia* to specify a minimum acceptable funded ratio for each State-supported defined benefit retirement plan. This funded ratio should be consistent with a funded ratio that actuaries and retirement plan experts generally consider to be acceptable. (p. 51)
2. The General Assembly may wish to require that a fiscal impact analysis be conducted in any year in which the proposed employer contribution rates to the trust funds of the Virginia Retirement System (VRS) for the defined benefit retirement plans are less than those certified by the VRS Board of Trustees. This analysis should (i) measure the impact of the proposed contribution rates on the funded status of the respective plans over the next ten years, (ii) measure the impact of the proposed contribution rates on the future contribution rates that will be required over at least the next two biennia, and (iii) be conducted using the board-approved actuarial assumptions. (p. 51)
3. The General Assembly may wish to amend the *Code of Virginia* to require that the costs incurred by the State and local governments directly because of modifications to provisions of the defined benefit plans for any employees be shared by the employee and the employer. (p. 67)
4. If the General Assembly wishes to further reduce the costs of the defined benefit retirement system, it may wish to consider one or more of the following four modifications to the existing plans for State and local employees. The General Assembly may wish to (i) base all future retirees' benefits on an average final compensation of employees' 60 highest consecutive months of salary; (ii) revise the calculation of the cost of living adjustment (COLA) so that payments would increase by 100 percent of the first two percent in the Consumer Price Index (CPI), and by half of each percent increase in CPI from two to four percent, for a maximum COLA of three percent, for newly hired and existing employees; (iii) defer the COLA applied to the benefit payments for employees who retire with a reduced benefit amount until they reach the age at which they would have been eligible for an unreduced benefit, for newly hired and current employees; and (iv) change the benefit multiplier to 1.6 percent of average final compensation for new employees hired into the general State employees', teachers', and general

employee political subdivision plans. Changes that apply to existing employees should exempt employees within five years of eligibility for an unreduced retirement benefit. (p. 126)

5. The General Assembly may wish to adhere to seven guidelines if it wishes to implement a non-defined benefit retirement plan for State and local employees. The first five guidelines would apply to either a combination plan or a defined contribution plan and the last two apply to a defined contribution plan only. The alternative should (i) be optional for newly hired and existing employees, (ii) have a mandatory employee contribution that is equal to the employee's cost in the defined benefit plan, (iii) be accompanied by a comprehensive and ongoing program to educate employees about financial planning for retirement, (iv) be accompanied by an investment platform that provides appropriate investment choices for employees with a range of investment abilities, such as lifecycle funds, (v) provide a benefit for employees who are unable to work due to a disabling condition, (vi) provide employees with one opportunity to change their plan membership within five years, and (vii) include a mechanism to maintain a necessary level of cash flow into the defined benefit plans' trust funds to ensure that existing unfunded liabilities continue to be paid for. (p. 135)

Appendix

A Study Mandate

FEB 28 2011

COMMONWEALTH OF VIRGINIA

FINANCE COMMITTEE
10TH FLOOR, GENERAL ASSEMBLY BUILDING
910 CAPITOL STREET
RICHMOND, VIRGINIA 23219
(804) 698-7480

CHARLES J. COLGAN, CHAIRMAN

SENATE

February 28, 2011

Glen S. Tittermary, Director
Joint Legislative Audit and Review Commission
General Assembly Building, Suite 1100
Richmond Virginia 23219

Dear Mr. Tittermary:

As you know, several bills have been proposed for consideration during the 2011 session of the General Assembly that would make significant structural changes in the retirement program for Virginia's public employees. Chief among these are SB 1008, SB 1115, and HB 2410. These bills would have provided for an optional defined contribution retirement system.

We are aware of the 2008 JLARC report that took a comprehensive view of employee salaries and benefits, including retirement benefits. Given the dramatic changes in Virginia's economic and budgetary outlook since that time, it is the view of the Senate that additional study should be undertaken before further, significant changes in the Commonwealth's public employee retirement programs are adopted.

With this I mind, I ask that you conduct a follow-up review of Virginia's employee retirement programs (including any related employee sickness and disability coverage). I ask that the review be completed in 2011, and that JLARC staff examine and make recommendations where appropriate on the following issues:

1. At the most basic level, and without regard to current constitutional and statutory provisions, should the Commonwealth provide an employer-sponsored retirement program for public employees? If so, why? If not, why not?
2. What are the objectives, historical intent, and distinguishing characteristics of defined contribution plans, defined benefit plans, and other retirement plan designs?
3. What goals should Virginia's state and local governments try to achieve through offering a retirement plan, and how should they balance the employer and employee perspectives?
4. What is an appropriate percentage of an employee's salary that should be contributed towards retirement, and what portion of that should be funded by the employee and the employer?
5. What is an appropriate target retirement age range for State and local employees?
6. What is an appropriate percentage of an employee's salary that should be replaced once an employee retires, and what portions of that income replacement should come from the employer retirement plan, Social Security, and other savings?
7. Does the Virginia Retirement System's current defined benefit plan achieve the goals identified for state and local government plans? If not, how should the current retirement plan be changed and/or should an alternative plan be created?
8. If an alternative retirement plan is desirable, what options are available? How would various options affect Virginia's ability to achieve the intended purposes of a retirement plan and its ability to adequately fund the plan over time? Which option would best meet the needs of the Commonwealth, its localities, and school divisions?
9. What are the relative merits of offering a single, mandatory plan versus optional plans for new and existing employees? If any new plan is available for existing employees, what are the optimal asset transfer rules that should be implemented? In addition, for retirement plans that include funds managed by

employees, what are the most suitable investment and management structures?

In conducting this review, input from organized employee groups should be solicited; however, I feel that it is essential for JLARC to utilize tools such as focus groups to obtain direct input from state and local employees. These can then be used to make accurate forecasts of potential employee participation and resultant costs. Given the magnitude of the Commonwealth's retirement program, an accurate estimate of costs associated with any recommendation is essential.

The costs of consulting services, including actuarial analysis, required to complete this review can be paid for by the Virginia Retirement System as part of JLARC's oversight authority.

Sincerely,

Charles J. Colgan
Chairman

Appendix

B Research Activities and Methods

Key JLARC staff research activities used for this study included

- structured interviews with human resource managers at various State agencies, executive staff at the Department of Human Resource Management and the Virginia Retirement System (VRS), organizations representing the interests of Virginia's public sector employees, staff of other states' retirement systems, and national retirement experts;
- group interviews with active State and local VRS plan members;
- an online survey of State employees;
- an online survey of State agency human resources managers;
- review and analysis of findings and recommendations provided by two actuarial consultant firms that conducted actuarial analysis related to the study;
- a review of current literature on retirement planning, retirement plan design, and retirement benefit funding practices;
- a review of other states' retirement plan documents; and
- attendance at relevant meetings of the VRS Board of Trustees.

STRUCTURED INTERVIEWS

During the review, JLARC staff conducted individual interviews with State agency staff, organizations representing State and local employees and teachers, organizations representing Virginia's local governments, retirement system staff from other states, and national retirement benefit experts. In total JLARC staff conducted 30 structured interviews with these individuals and groups.

Several group interviews were also conducted for this study. Group interviews were conducted with State agency human resource managers, State employees, local government employees (including local public safety employees), and teachers.

The purposes of the interviews varied, but one of the main goals was to obtain feedback on potential changes to current retirement benefits, and how these changes might affect the purposes of providing the benefits – that is, recruiting and retaining employees, and allowing employees to retire at the right time. Another goal was to gauge employee and employer interest in alternative retirement plan designs, such as a defined contribution or combination plans.

Interviews with State Agency Staff

JLARC staff conducted several interviews with staff at the Virginia Retirement System (VRS) to discuss potential changes to the VRS retirement plans and to obtain their perspective on administering an alternative to the existing defined benefit plan. Interviews were also conducted with staff at the Department of Human Resources Management (DHRM) to obtain their feedback on potential retirement benefit changes to the retirement benefits, particularly how changes would impact agencies' ability to recruit and retain qualified employees.

JLARC staff also conducted a group interview with State agency human resource managers from six large State agencies: Department of Behavioral Health and Developmental Services (DBHDS), Department of Corrections (DOC), Department of General Services (DGS), Virginia Community College System (VCCS), Virginia Department of Transportation (VDOT), and Virginia State Police (VSP). The main purpose of this interview was to learn about the role of retirement benefits in the agencies' efforts to recruit and retain qualified employees, and to obtain the managers' feedback on how any changes to retirement benefits, including the introduction of an alternative retirement plan, might affect recruitment and retention efforts.

Group Interviews With State and Local Government Employees

An important activity for this study was obtaining input from State and local employees regarding potential modifications to the retirement benefits. JLARC staff obtained this employee input partially through group interviews with employees. JLARC staff also interviewed representatives of organizations representing State and local employees, including the Virginia Governmental Employees Association, the Virginia Education Association, and the Virginia State Police Association. These interviews were designed to obtain employees' perspectives on how well the retirement benefits are achieving their purposes, obtain employee feedback on potential changes to the current defined benefit plan and how these changes might affect recruitment and retention, and gauge employee interest in an optional alternative plan.

JLARC staff conducted several group interviews with local employees and teachers across the State. These group interviews were arranged by representatives from the Virginia Municipal

League (VML), the Virginia Association of Counties (VACO), and the Virginia Education Association (VEA). VML, VACO, and VEA were asked to invite between 10 and 15 employees to attend each meeting, for a maximum of 90 total participants. These meetings were held in four localities, but included employees from several local governments and school divisions throughout the respective region. Several employees were unable to schedule time to attend the meetings, likely because of the distance that some were asked to travel and because of work schedules. Approximately 50 employees attended these interviews.

JLARC staff also conducted a group interview with local public safety employees from across the State.

In addition, JLARC staff conducted interviews with the following groups:

- VML and VACO's VRS work group, which is composed of local government leaders from across the State;
- DHRM's Employee Advisory Group (composed of State employees);
- Staff from a local government in Northern Virginia to hear their concerns about the potential introduction of an alternative retirement plan design; and
- Administrators from four higher education institutions to discuss how an alternative retirement plan design might affect their general employees.

Phone Interviews with Retirement Experts and Retirement Administrators in Other States

JLARC staff conducted phone interviews with retirement plan administrators and staff in several other states, including

- Colorado,
- Michigan,
- North Dakota,
- Ohio,
- South Carolina, and
- Utah.

These states were selected because they have recently considered changing their retirement benefits and/or have implemented optional defined contribution or combination plans. The main purpose of the interviews was to discuss the changes they had made to their retirement benefits and learn about their experiences in making these changes.

Staff also conducted a telephone interview with the director and staff of the Center for Retirement Research at Boston College, a nationally recognized organization that has conducted research on several of the retirement issues related to this study. JLARC staff also interviewed retirement plan experts at the National Conference of State Legislatures and the National Association of State Retirement Administrators.

SURVEYS OF STATE EMPLOYEES AND AGENCY HUMAN RESOURCE MANAGERS

To obtain additional feedback on potential changes to retirement benefits, and further determine whether the purposes of the retirement benefits were being met, JLARC staff developed and administered two surveys for this study: one for State employees and one for State agency human resource managers. Both surveys were administered online using JLARC staff's survey software.

Survey of State Employees

As stated earlier, employee feedback was a critical component of the study. JLARC staff administered an online survey to a sample of State employees. The main purpose of the survey was to determine the role of retirement benefits in recruiting and retaining employees, understand employees' satisfaction with their current retirement benefits, estimate the number of employees who might elect to participate in an optional alternative type of plan, and determine how employees could respond to changes to the current defined benefit plans.

JLARC staff surveyed a random sample of 5,160 classified State employees rather than the entire State workforce, due to the short-term nature of the study. This represented approximately 6.5 percent of classified State employees who are actively enrolled in a defined benefit VRS plan. To select the sample, JLARC staff obtained a file of all active classified employees from DHRM and used this file to generate a stratified sample of employees by plan type (VRS, VaLORS, and SPORS). JLARC staff also generated the sample so that a proportionately greater number of newly hired employees were included because of the importance of their feedback on alternative retirement plan designs.

The survey asked employees about their satisfaction with retirement benefits, the role of retirement in their decision to begin working and continue working for the State, their plans for retirement, and whether they thought they would be able to retire with an adequate income when eligible. The survey also asked employees how likely they would be, if given the choice, to switch to a defined contribution or combination retirement plan so JLARC staff could estimate a potential election rate for alternative plan designs. To assist employees in responding to this question, JLARC staff developed a document that employees could access within the online survey, which illustrated hypothetical retirement plan scenarios and explained to employees what their potential benefits might be under different types of plans and what assumptions were used in developing the scenarios. The defined contribution plan modeled for survey respondents mirrored the plan that would have been implemented under HB2410 (2011).

A pre-test of the draft survey was conducted prior to administering the survey to the entire sample and minimal changes were made to the survey based on the pre-test comments and results. The final survey was administered over a 10-day period. JLARC staff received 1,790 complete, useable surveys, for a response rate of 35 percent. Table B.1 shows the response rate by plan type.

Table B.1: Employee Survey Response Rate

Plan	Number in Sample	Responses	Response Rate by Plan	% of Total Received
SPORS	162	42	25.93%	2.35%
VaLORS	599	72	12.02%	4.02%
VRS	4,399	1,676	38.10%	93.63%
Total	**5,160**	**1,790**	**34.60%**	**100.00%**

Source: JLARC staff analysis.

Because JLARC staff surveyed a stratified sample of employees by plan type, the staff weighted survey responses by plan type (VRS, VaLORS, and SPORS), where appropriate, to account for over representation or underrepresentation in the survey results. For the VaLORS plan, for example, JLARC staff calculated VaLORS members as a percentage of the total population of classified employees, and divided that by the percentage of total survey respondents who were VaLORS members. This percentage, or weight, was then applied to all VaLORS survey responses.

Survey of State Agency Human Resource Managers

As discussed earlier, JLARC staff conducted a group interview with human resource managers from six State agencies. Because of the valuable information provided by the managers during this interview, JLARC staff decided to also survey State agency human resource managers to obtain their input on the retirement benefits provided by the State.

JLARC staff developed a short survey that asked the managers about the role of retirement benefits in their efforts to recruit and retain employees, how changes in retirement benefits would affect their agencies' ability to recruit and retain qualified staff, and whether the employees in their agency have expressed an interest in different types of retirement plans. JLARC staff emailed the online survey to 77 State human resource managers of agencies that employ classified staff, based on a list provided by DHRM, including the six managers who attended the group interview. In addition, JLARC staff asked the managers of the three State agencies with multiple facilities and/or institutions—DBHDS, DOC, and VCCS—to forward the survey to the human resource managers in those facilities/institutions. A total of 139 managers received the survey and 93 responded, for a response rate of 67 percent.

ANALYTICAL AND CONSULTING SUPPORT FROM MERCER AND CAVANAUGH MACDONALD ACTUARIES

The study mandate authorized JLARC staff to use outside consultant support during this review. JLARC staff relied on two different consultants to support the analysis for this review.

Mercer, who is JLARC's actuary, provided support and analysis in three different phases. Mercer's contributions included

- working papers on income replacement in retirement and on the appropriate structure of an investment platform for a defined contribution retirement plan;
- a "Total Remuneration Comparison Analysis" that compared the Commonwealth's benefits and cash compensation to a peer group of 15 workforce competitors within the healthcare, government, and general industry sectors as well as to other states;
- proposals for modifying the current retirement plans provided to State and local employees, including proposals for an alternative type of retirement plan;
- analysis of the impact of potential modifications to the defined benefit plans, or the introduction of an alternative plan, on the State's ability to recruit and retain qualified employees, and on the competitiveness of the retirement programs; and
- analysis of the potential income replacement employees could achieve under various alternative plan designs, based on different salary levels, contribution rates, lengths of service, and investment return scenarios.

Cavanaugh Macdonald, who is the VRS actuary, provided analysis of the impact of potential plan design modifications on the costs of the retirement plans through fiscal year (FY) 2022. Cavanaugh Macdonald also analyzed how the implementation of an alternative type of retirement plan could affect the expected costs through FY 2022.

REVIEW OF LITERATURE AND OTHER STATES' RETIREMENT PLAN DOCUMENTS

JLARC conducted an extensive review of literature about different retirement plan designs, and trends in public and private retirement benefits. This included various studies and reports by several nationally recognized organizations, including

- Center for Retirement Research at Boston College,
- National Association for State Retirement Administrators,
- National Conference on State Legislatures,
- Employee Benefit Research Institute,
- National Association of Government Defined Contribution Administrators, Inc.,
- National Institute on Retirement Security, and
- Pew Center on the States.

JLARC staff also reviewed several documents, studies, and reports by the Government Accountability Office, retirement consultants such as Towers Watson, and other states that have recently made, or are considering making, changes to their retirement benefits.

Appendix C

Agency Response

As part of an extensive validation process, State agencies and other entities involved in a JLARC assessment are given the opportunity to comment on an exposure draft of the report. JLARC staff provided an exposure draft of this report to the Virginia Retirement System. Appropriate technical corrections resulting from the agency's comments have been made in this version of the report. This appendix includes the agency's written response letter.

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Robert P. Schultze
Director

December 5, 2011

Mr. Glen S. Tittermary
Director
Joint Legislative Audit and Review Commission
General Assembly Building, Suite 1100
Richmond, Virginia 23219

Dear Glen:

Thank you for the opportunity to review the exposure draft of Review of Retirement Benefits for State and Local Government Employees, dated November 22, 2011. My staff and I appreciate the considerable amount of time and research that has gone into producing this report, and we believe that the members of the General Assembly will find it informative and thoughtfully drafted. This is a dynamic time for public pension plans and having this report will be of great assistance to members of the General Assembly as they consider a range of options for possible changes to the pension plans and benefits offered to Virginia's state and local government employees.

While VRS raised the issue with JLARC staff during the review process, we would like to take this opportunity to reemphasize the point that successful implementation of changes to the current VRS plan design as well as the development of any new plan(s) will require ample time for transition and implementation. Depending upon the extent of the changes, as much as 18 months could be required to implement the following:

- VRS system modifications
- system modifications for state and local VRS employers, including the Department of Accounts
- system modifications by private third party administrators and record-keepers
- revised plan documents for submission to the IRS
- new educational materials and online benefit calculators for current members and new hires

With respect to the legal aspects of any proposed changes to public pension plans, it is important to note that as a general rule, prospective changes for new hires should be acceptable by Courts if challenged. Similarly, those changes that grandfather, protect, or freeze benefits earned prior to the effective date of legislation should also face less scrutiny by Courts if challenged. In contrast, little legal guidance exists, particularly specific to Virginia, to provide clear answers on what Courts would deem acceptable changes to retirement benefits based on service and compensation earned prior the effective date of the change. In short, even changes that are noted as low-risk in the report can be challenged, and there is very little Virginia

An Independent Agency of the Commonwealth of Virginia

precedent on these issues. Decisions from other states cannot be relied on as predictors of the outcome of a case in Virginia due to differences in statutory and constitutional provisions and the case law in that particular state. We strongly concur with the recommendation in the report that if the General Assembly decides to change retirement benefits already earned by current employees or retirees, it should seek guidance from the Attorney General's Office.

The report refers to 80% funding of a public pension plan as an acceptable funding ratio. Funding levels, however, should be considered in the context of historical trends. We believe an 80% funded ratio should be the minimally acceptable funded ratio for a mature defined benefit plan. We recommend that, as is the case with private sector pension plans under the Pension Protection Act, an 80% funding ratio should be considered the minimum funded ratio below which enhanced funding effort should be required.

We are also concerned about any option that would provide participants a window during which they could switch between optional plans. The report recommends that such a window be part of any DC plan. VRS is concerned that allowing members the ability to switch from a DC plan to a DB plan would lead to adverse selection issues, particularly with regard to ancillary benefits, such as disability coverage and the purchase of prior service at discounted rates.

The report recommends that higher education institutions that sponsor their own DC plans for faculty be included in the process of crafting a defined contribution plan for general state and local employees. VRS supports consulting with institutions for their experience and for suggestions on best practices that would enhance the experience of participants. We concur with JLARC's actuary, however, that any such plan be structured as one large comprehensive plan with a single administrator. A single administrator approach would result in a larger asset base by which to bargain for the best fees and services for the benefit of participating members. It would also provide enhanced portability for members transitioning employment among and between higher education and other state and local VRS employers.

The VRS plan actuary, Cavanaugh Macdonald, LLC, has assisted with the impact analysis of many of the scenarios outlined in the report, but has not approved or endorsed the final report. Likewise, VRS benefits counsel, Troutman Sanders LLP, has reviewed the report but has not approved or endorsed it.

Thank you again for the opportunity to comment on the exposure draft. We are available to provide assistance to JLARC and members of the General Assembly as the proposals set out in the report are considered.

Sincerely yours,

Robert P. Schultze
Director

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405. Review of Virginia's Transportation Planning and Programming
406. VRS Biennial Status and Semi-Annual Investment Report No. 35
407. Special Report: State Spending on Standards of Quality (SOQ) Costs, FY 2010
408. Review of Virginia's Corporate Income Tax System
409. Use of Cooperative Procurement by Virginia's School Divisions
410. Virginia Compared to the Other States: 2011 Edition
411. Compliance Review of the VCU Management Agreement
412. Review of the Tobacco Indemnification and Community Revitalization Commission
413. State Contracting and the Federal Immigration Reform and Control Act
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