

Optional Retirement Plan for Higher Education

Review of Contribution Rates

**Report to the Combined Committee Meeting of the
Defined Contribution Plan Advisory Committee (DCPAC) and the
Optional Retirement Plan Advisory Committee (ORPAC)**

December 11, 2008

Preface

Section 51.1-126 of the *Code of Virginia* requires the Board of Trustees of the Virginia Retirement System (VRS) to examine the contribution rates for the Optional Retirement Plan for Higher Education at least once every six years.

Staff of the VRS compiled the data and performed the required contribution rate analysis. As required by *Code*, the State Council of Higher Education's (SCHEV) salary peer group formed the basis for the analysis of the mean contribution rate. The VRS actuary, Wachovia Retirement Services, performed additional analyses.

Table of Contents

Description	Page
Executive Summary	4
Introduction	5
Methodology	5
Staff Findings	5
Actuarial Review and Results	6
Conclusion	7
Appendix A: Sixteen Senior Virginia Institutions	8

Executive Summary

The Board of Trustees of the Virginia Retirement System (VRS) is required by Section 51.1-126 of the *Code of Virginia* to review the contribution rates for the Optional Retirement Plan for Higher Education (ORPHE) at least once every six years. In order to facilitate the review, VRS staff collected data from the national peer institutions identified by the State Council of Higher Education for Virginia. The employer contribution data for each of the peer institutions was collected to determine the salary peer group mean contribution rate for the fiscal year ending 2007. In addition, the data was reviewed by the VRS actuary, Wachovia Retirement Services, and contribution rates were compared to VRS benefits at retirement using various scenarios and assumptions.

The results of the analysis determined that the current ORPHE contribution rate provides benefits comparable to VRS at a broad spectrum of retirement age and service combinations. Additionally, the current 10.4 percent contribution rate was found to be competitive with the peer group mean. At this time, a revision by the Commonwealth to the 10.4 percent contribution rate is not recommended.

Introduction

The Virginia Retirement System performed a review of the contribution rates for the faculty members participating in the Optional Retirement Plan for Higher Education (ORPHE), a defined contribution plan. The review was conducted pursuant to Section 51.1-126 of the *Code of Virginia*. This *Code* section also sets forth the contribution rate for optional retirement plans at 10.4 percent. The *Code* further requires that:

These contribution rates shall be examined by the Board at least once every six years. The examination shall consider the salary peer group mean contribution as determined by the State Council of Higher Education and the Virginia Retirement System actuary, and, if deemed advisable, recommend a revision to the rate of contribution by the Commonwealth.

Methodology

The State Council of Higher Education of Virginia (SCHEV) is required to develop a set of peer institutions for each public college and university in Virginia in order to assess the Commonwealth's funding of faculty salaries. SCHEV uses a statistical procedure called cluster analysis, based on nineteen quantitative characteristics, to identify institutions similar to each Virginia institution. SCHEV identified twenty-five peers for each of Virginia's sixteen senior Universities. The twenty-five peer institutions were not mutually exclusive.

In total, 284 peer institutions were identified by SCHEV. VRS staff contacted each of the 284 institutions and determined if the institution offered a defined benefit plan, a defined contribution plan, or a choice between either a defined benefit or defined contribution plan. VRS obtained data from 282 out of the 284 institutions. The two institutions that did not respond to the VRS inquiries were private. For each of the peers in the study that offered a defined contribution plan, VRS obtained the employer contribution rate. In addition, VRS staff collected data regarding the required employee match, vesting period, waiting period, and the institution's public or private status. VRS staff also noted both the minimum and maximum contribution rates for each institution, because many institutions have tiered systems where the contribution rate depends upon salary level, time in service, and age. The employer contribution data for each of the peer institutions was collected for the fiscal year ending 2007.

Staff Findings

Responding peers represented a mix of public (176) and private (106) institutions. Thirty-five responding institutions only offered a defined benefit plan. VRS staff found that 247 of the peer institutions reviewed offered participants a defined contribution plan.

As noted previously and as required by *Code*, this examination must include a calculation of the mean or average contribution rate. The mean contribution rate for the peers reviewed was 8.9 percent. VRS staff also found that median was 9.3 percent and the mode was 10 percent. Table 1 below provides measures of central tendency for the total peer group. The table also segregates the results for the public and private institutions within the peer group. The data collected was forwarded to the VRS actuary for additional review.

	Private	Public	All Peers
Average (Mean)	9.4%	8.5%	8.9%
Median	10.0%	8.3%	9.3%
Mode	10.0%	10.0%	10.0%
Source: VRS staff analysis of contribution rates provided at SCHEV peer institutions			

Actuarial Review and Results

As required by the *Code*, the VRS actuary reviewed the data compiled by the VRS staff. The actuary also conducted additional analyses, including comparing the percent of final pay (replacement ratio) under various scenarios and assumptions for the VRS Defined Benefit Plan to the Optional Retirement Plan for Higher Education Defined Contribution Plan. In comparing the two plans, the actuary made assumptions regarding such items as the duration of payments in retirement, investment earnings, salary increases, and post-retirement cost of living adjustments. The specific assumptions employed by the actuary are listed below:

- Age of hire: 30, 35, 40
- Retirement ages: 55, 60, 65
- Annual compensation increases: 4.5
- Contribution rate: 10.4%
- Rate of return on assets, pre-retirement: 7%, 7.5%, 8%
- Rate of return on assets, post-retirement: 7%
- COLA: 2.5%

According to the actuary, it is important to note that there is no single ORPHE contribution rate for all members, at all ages that will result in identical benefits to the VRS defined benefit plan. However, the actuary found that using the above listed assumptions, the VRS defined benefit plan provides greater benefits in most cases under all investment return scenarios employed. However, the actuary's analyses also found that the higher the rate of the return the more favorably the ORPHE will compare to the DB plan. The actuary's analysis also showed that the ORPHE compares more favorably to the DB plan when the participant has fewer years of service. The actuary concluded that the current ORPHE contribution rate provides a reasonable benefit when compared

to the VRS defined benefit plan at a broad spectrum of retirement age and service combinations. In addition, the actuary found that the current 10.4 percent contribution rate was larger than both the average minimum and average maximum contribution rates provided by peer institutions.

Conclusion

The 10.4 percent rate is competitive with the peer group mean and a revision to the rate of contribution by the Commonwealth is not recommended at this time

Appendix A

Sixteen Senior Virginia Institutions

Christopher Newport University

College of William and Mary

George Mason University

James Madison University

Longwood University

Norfolk State University

Old Dominion University

Radford University

Richard Bland College

University of Mary Washington

University of Virginia

University of Virginia at Wise

Virginia Commonwealth University

Virginia Military Institute

Virginia State University

Virginia Tech