BPS&M
Bryan, Pendleton, Swats & McAllister, LLC
A Wells Fargo Company

Tennessee Consolidated Retirement System

Actuarial Report for the Teacher Legacy Pension Plan, a Cost-Sharing Defined Benefit Plan

As of June 30, 2014

GASB Statement No.67

Table of Contents

Accounting Governance Background

Statement No. 25 of the Governmental Accounting Standards Board was amended by Statement No. 67 of the Governmental Accounting Standards Board. Statement No. 67 became effective for the plan's financial statements for the fiscal year beginning after June 15, 2013. Statement No. 67 establishes financial reporting standards for state and local government pension plans that are administered through trusts or equivalent arrangements. The objective of this statement is to improve the usefulness of the information included in pension plan reports.

Purpose and Use

This report has been prepared exclusively for the Tennessee Consolidated Retirement System. Actuarial computations under Statement No. 67 are for purposes of fulfilling employer governmental accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of the statement. Bryan, Pendleton, Swats & McAllister, LLC is not responsible for consequences resulting from the use of any part of this report without prior authorization or approval. This report provides actuarial advice and does not constitute legal, accounting, tax or investment advice. Determinations for other purposes, such as funding, bond ratings, or judging benefit security, may be significantly different from the results shown in this report. Actuarial findings in this report are based on actuarial assumptions which reflect expected plan experience. Although the deviation of the actual future plan experience and the expected experience inherently creates some uncertainty with the results, in our opinion the actuarial assumptions reasonably reflect the expected future experience of the plan.

Applicability

The results included in this report are applicable only to the TCRS Teacher Legacy Pension Plan, a cost-sharing defined benefit plan. These results do not apply to the agent defined benefit plans within TCRS.

Data

The calculations shown in this report have been prepared using employee data and plan documentation furnished by the Tennessee Consolidated Retirement System as of June 30, 2013 and plan assets furnished by the Tennessee Consolidated Retirement System for the twelve month period ending June 30, 2014. While we have not audited the data, we have reviewed it for reasonableness and internal consistency, and to the best of our knowledge, there are no material limitations to the data provided. Summaries of the census data and plan provisions can be found in the Tennessee Consolidated Retirement System actuarial valuation report as of July 1, 2013. We are unaware of any subsequent event after June 30, 2014 which would have a material effect on the results presented in this report.

Assumptions, Methods, and Procedures

The results presented in this report comply with the assumptions, methods, and procedures under Statement No. 67. The results are based on a July 1, 2013 actuarial valuation date rolled-forward to a measurement date and reporting date of June 30, 2014.

Changes in Plan Provisions, Actuarial Assumptions, and Actuarial Methods

No changes were made to the actuarial assumptions and methods effective June 30, 2014.

Summaries of the plan provisions, actuarial assumptions and methods can be found in the Basis for Valuation section of this report and the Tennessee Consolidated Retirement System actuarial valuation report as of July 1, 2013.

Professional Qualifications

This report has been prepared under the supervision of Justin C. Thacker, a member of the American Academy of Actuaries, a Fellow of the Society of Actuaries, and a consulting actuary with Bryan, Pendleton, Swats and McAllister, LLC, who has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein. To the best of our knowledge this report has been prepared in accordance with generally accepted actuarial standards and our understanding of Government Accounting Standards Board Statement No. 67, including the overall appropriateness of the analysis, assumptions, and results and conforms to appropriate Standards of Practice as promulgated from time to time by the Actuarial Standards Board, which standards form the basis for the actuarial report. We are not aware of any direct or material indirect financial interest or relationship, including investment management or other services that could create, or appear to create, a conflict of interest that would impair the objectivity of our work.

Justin C. Thacker
Fellow, Society of Actuaries
Enrollment No. 14-6078
Phone 615.665.5387

December 5, 2014
Date

Tim C. Lavender
Fellow, Society of Actuaries
Enrollment No. 14-6745
Phone 615.665.5305

December 5, 2014
Date

Summary of Plan Provisions

Please refer to the Tennessee Consolidated Retirement System actuarial valuation report as of July 1, 2013 for a complete summary of plan provisions.

Summary of Actuarial Assumptions and Methods

Investment Rate of Return

7.5% per annum, compounded annually

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2012 actuarial experience study by considering the following three techniques: (1) the 25-year historical return of the TCRS at June 30, 2012, (2) the historical market returns of asset classes from 1926 to 2012 using the TCRS investment policy asset allocation, and (3) capital market projections that were utilized as a building-block method in which best-estimate ranges of expected future real rate of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. Four sources of capital market projections were blended and utilized in the third technique. The blended capital market projection established the long-term expected rate of return by weighting the expected future real rate of return by the target asset allocation percentage and by adding inflation of 3 percent. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocations
U.S. equity	**6.46%**	**33%**
Developed market international equity	**6.26%**	**17%**
Emerging market international equity	**6.40%**	**5%**
Private equity and strategic lending	**4.61%**	**8%**
U.S. fixed income	**0.98%**	**29%**
Real estate	**4.73%**	**7%**
Short-term securities	**0.00%**	**1%**
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 7.5 percent based on a blending of the three techniques described above.

Discount Rate

7.5% per annum, compounded annually

Paragraph 43 of Statement No. 67 provides for an alternative method to be used other than the projection of the pension plan's fiduciary net position based on projected contributions, benefit payments and investment earnings. The current contribution policy requires contributions of the normal cost plus a closed amortization of the unfunded liabilities (not to exceed 30 years from when the unfunded liability was created). As of the July 1, 2013 valuation report, the current amortization period is 8 years. The funded ratio using actuarial asset values as of July 1, 2013 was 96.0%. Based on actuarial theory if the actuarial assumptions are met, the plan's fiduciary net position will remain positive.

Actuarial Valuation Method

All liabilities and normal costs shown in this report are calculated based on the Entry Age Normal method.

Asset Valuation Method

Fair Market Value

Additional Assumptions

Please refer to the Tennessee Consolidated Retirement System actuarial valuation report as of July 1, 2013 for a complete summary of actuarial assumptions.

Selection of Assumptions

The TCRS Board of Trustees selected the assumptions described above based on the review of plan experience in conjunction with an experience study conducted as of June 30, 2012. A complete plan experience study is conducted every 4 years.

Summary of Participant Data

Please refer to the Tennessee Consolidated Retirement System actuarial valuation report as of July 1, 2013 for a complete summary of participant data.

This section presents specific information required under Statement No. 67. The information in this report is to satisfy the reporting for the pension plan. This section contains the following:

- Statement of Change in Fiduciary Net Position
- Net Pension Liability (Asset) including discount rate sensitivity and reconciliation between years

Fiduciary Net Position is the amount of assets available for benefits in the Pension Plan.

Total Pension Liability is the plan liability determined using assumptions listed in the Summary of Actuarial Assumptions.

Net Pension Liability (Asset) is the difference in the Total Pension Liability and the Fiduciary Net Position.

Statement of Changes in Fiduciary Net Position

	June 30, 2014
Additions	
Contributions:	
Employer	$348,474,888
Employee	195,520,938
Total Contributions	543,995,826
Investment Income:	
Net Investment Income	3,054,117,821
Other	0
Total Additions	3,598,113,647
Deductions	
Benefit Payments / Refunds	1,037,013,093
Administrative Expenses	2,663,319
Other	0
Total Deductions	1,039,676,412
Net Increase in Net Position	2,558,437,235
Net Position Restricted for Pensions	
Beginning of Year	18,656,535,899
End of Year	$21,214,973,134

Net Pension Liability (Asset) (NPL)

Determination of Net Pension Liability (Asset)

The components of the net pension liability (asset) at June 30, 2014 were as follows:

Total Pension Liability	21,151,810,794
Plan Fiduciary Net Position	(21,214,973,134)
Net Pension Liability (Asset)	$(63,162,340)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	100.30%

Sensitivity of Net Pension Liability (Asset) to Changes in the Discount Rate

The following represents the net pension liability (asset) calculated using the stated discount rate, as well as what the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease (6.50%)	Current Rate (7.50%)	1% Increase (8.50%)
Net Pension Liability (Asset)	$2,677,321,642	$(63,162,340)	$(2,332,660,416)

Schedule of Changes in the Net Pension Liability (Asset) and Related Ratios

	fiscal year ending June 30									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Pension Liability										
Service cost	$404,576,942									
Interest	1,483,656,307									
Changes of benefit terms	--									
Differences between expected and actual experience	--									
Changes of assumptions	--									
Benefit Payments / Refunds	(1,037,013,093)									
Net Change in Total Pension Liability	851,220,156									
Total Pension Liability - beginning	20,300,590,638									
Total Pension Liability - ending (a)	$21,151,810,794									
Plan Fiduciary Net Position										
Contributions - employer	$348,474,888									
Contributions - employee	195,520,938									
Net investment income	3,054,117,821									
Benefit Payments / Refunds	(1,037,013,093)									
Administrative expenses	(2,663,319)									
Other	--									
Net Change in Plan Fiduciary Net Position	$2,558,437,235									
Plan Fiduciary Net Position - beginning	18,656,535,899									
Plan Fiduciary Net Position - ending (b)	$21,214,973,134									
Net Pension Liability (Asset) - ending (a) - (b)	$(63,162,340)									
Plan Fiduciary Net Position as a % of the Total Pension Liability	100.30%									
Covered-employee payroll	$3,925,131,835									
Net Pension Liability (Asset) as a % of covered-employee payroll	-1.61%									

Notes to Schedule

See Summary of Plan Provisions for notes regarding benefit changes. See Summary of Actuarial Assumptions and Methods for notes regarding changes in assumptions.