

December 21, 2015

Board of Trustees  
Teachers' Retirement System of Oklahoma  
Oliver Hodge Education Building  
2500 N. Lincoln Boulevard, 5th Floor  
Oklahoma City, Oklahoma 73105

**Subject: GASB Reporting and Disclosure Information for OTRS Fiscal Year Ending  
June 30, 2015 – Revised**

Dear Members of the Board:

This report provides information required by the Teachers' Retirement System of Oklahoma (OTRS) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans." Additionally, this report provides information required by the governmental employers participating in OTRS in connection with the GASB Statement No. 68, "Accounting and Financial Reporting for Pensions." This information can be used by governmental employers in financial reporting for fiscal years ending between (and including) June 30, 2015 and June 30, 2016. The information provided herein was prepared for the purpose of assisting OTRS and the governmental employers in the compliance with the financial reporting and disclosure requirements of GASB Nos. 67 and 68.

The calculation of the liability associated with the benefits referenced in this report was performed for the purpose of satisfying the requirements of GASB Nos. 67 and 68 and is not applicable for purposes of funding the plan. A calculation of the plan's liability for other purposes may produce significantly different results. This report may be provided to parties other than OTRS only in its entirety and only with the permission of OTRS.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of June 30, 2015. It is our opinion that the recommended assumptions are internally consistent, reasonable, and comply with the requirements under GASB Nos. 67 and 68.

This report provides the Collective Pension Amounts under GASB No. 68 which will be allocated to the governmental employers participating in OTRS. It is our understanding that the auditors prepared the final calculation of the proportionate share of the Collective Pension Amounts associated with the governmental employers last year. We are prepared to assist with the calculation of these amounts this year, as needed.

This report is based upon information, furnished to us by OTRS, which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided to us by OTRS.

Certain differences exist between the financial information utilized in this GASB reporting and the information used for the funding valuation on the same date due to the timing of financial valuations of certain investments. The financial information utilized in this GASB reporting is based on the Statement of Changes in Fiduciary Net Position that was provided to us by OTRS on November 24, 2015.

Subsequent to the completion of the funding valuation on the same date, updates were also made to valuation payroll for certain active members for purposes of calculating the Total Pension Liability. These updates resulted from comments received during the financial audit of OTRS regarding the original census data provided for the actuarial valuation.

Certain tables included in the Required Supplementary Information should include a 10-year history of information. As provided for in GASB Nos. 67 and 68, this historical information is only presented for the years in which the information was measured in conformity with the requirements of GASB Nos. 67 and 68. The historical information in this report will begin with the information presented for the OTRS fiscal year ending June 30, 2014.

Paragraph 57 of GASB No. 68 indicates that contributions to the pension plan subsequent to the measurement date of the Net Pension Liability and prior to the end of the employer's reporting period can be reported by the employer as a deferred outflow of resources related to pensions. The information contained in this report does not incorporate any contributions made to OTRS subsequent to June 30, 2015.

This report complements the actuarial valuation report as of June 30, 2015, provided for plan funding purposes, which was also provided to OTRS and should be considered together as a complete report for the plan year ending June 30, 2015. Please see the actuarial valuation report as of June 30, 2015 for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. Mr. Falls and Mr. Randall are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,  
**Gabriel, Roeder, Smith & Company**



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Chief Executive Officer

## Summary of Population Statistics

The total pension liability described in this report is based on the plan membership as of June 30, 2015:

### Summary of Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	58,929
Inactive Plan Members Entitled to But Not Yet Receiving Benefits*	20,387
Active Plan Members	90,388
Total Plan Members	169,704

\* Includes 9,930 nonvested terminated members entitled to a refund of their member contributions.

## Measurement of the Net Pension Liability

The net pension liability is measured as the total pension liability, less the amount of the plan's fiduciary net position. In actuarial terms, this is analogous to the accrued liability as measured using the individual entry age normal actuarial cost method less the market value of assets (not the smoothed actuarial value of assets seen in our actuarial valuations based on the Board's adopted assumptions and methods).

A single discount rate of 8.00% was used to measure the total pension liability as of June 30, 2014 and June 30, 2015. This single discount rate was based on an expected rate of return on pension plan investments of 8.00%. Based on the stated assumptions and the projection of cash flows, the pension plan's fiduciary net position and future contributions were projected to be available to finance all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The projection of cash flows used to determine this single discount rate assumed that plan member and employer contributions will be made at the current statutory levels and remain a level percentage of payroll. The projection of cash flows also assumed that the State's contribution plus the matching contributions will remain a constant percent of projected member payroll based on the past five years of actual contributions.

## Actuarially Determined Contribution

This report presents the Actuarially Determined Contribution (ADC) for the fiscal year ending June 30, 2015. This contribution is the amount necessary to fund the normal cost and to amortize the UAAL as a level percentage of payroll over 30 years.

As noted, the ADC for the fiscal year ending June 30, 2015 is calculated based on a 30-year open amortization period. This means that the ADC would always be calculated with the same 30-year period and the UAAL would never completely disappear. A new funding policy was adopted for the fiscal year ending 2016 which incorporates a shorter amortization period and will be the basis for the Actuarially Determined Contribution beginning with the OTRS fiscal year ending 2016.

### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

The following table provides the sensitivity of the net pension liability to changes in the discount rate as of June 30, 2015. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is one-percentage-point lower or one-percentage-point higher than the single discount rate:

#### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

	1% Decrease 7.00%	Current Single Rate Assumption 8.00%	1% Increase 9.00%
	\$ 8,434,863,027	\$ 6,101,626,098	\$ 4,140,434,421

### Methodology for Proportionate Shares

Based on guidance from the OTRS Board, each governmental employer's proportionate share will be determined based on the employer's contribution to OTRS as a percentage of the total contribution to OTRS by all employers. However, an additional adjustment will be made to the allocation to account for the comprehensive universities' short-term obligation to pay the 2.5% initial funding surcharge associated with the Alternate Retirement Plan (ARP).

The additional adjustment for the comprehensive universities is based on the present value of the remaining initial funding surcharge contributions expected to be made by the comprehensive universities. The number of remaining payments is based on the most recent assessment of the initial funding surcharge as outlined in the "Agreement of Understanding Entered into Among OSU, OU and OTRS."

The following table outlines the calculation of the present value of the remaining initial funding surcharge contributions expected to be made by the comprehensive universities:

	University of Oklahoma	OU Health Sciences Center	Oklahoma State University	Total
Expected Remaining Duration of Initial Funding Surcharge Contributions				7 years
Initial Funding Surcharge Contributions for FY2015	\$ 2,394,460	\$ 1,965,644	\$ 2,191,456	\$ 6,551,560
PV of Remaining Initial Funding Surcharge Contributions	14,149,737	11,615,707	12,950,112	38,715,556

### Support Provided by Nonemployer Contributing Entity

The State of Oklahoma contributes a percentage of its revenues from sales taxes, use taxes, corporate income taxes, individual income taxes, and lottery proceeds to OTRS.

Since the State makes contributions to a pension plan that is used to provide pensions to the employees of other entities (e.g., school districts), the State is considered a nonemployer contributing entity for OTRS.

According to the criteria outlined in paragraph 15 of Statement 68, the State is not in a Special Funding Situation with OTRS. The primary reason is that the State's contributions are dependent upon one or more events or circumstances unrelated to the pensions. As a result, paragraph 58 of Statement 68 indicates that each governmental employer should recognize "revenue" equal to the governmental employer's proportionate share of the contributions to the pension plan from nonemployer contributing entities. The accounting treatment for this support provided by a nonemployer contributing entity should be treated in the same manner as the governmental employer would treat a grant in the entity-wide financial statements.

For the fiscal year ending June 30, 2015, support provided to OTRS by nonemployer contributing entities totaled \$311,945,400.

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
AS OF JUNE 30, 2015**

<b>Fiscal Year</b>	<b>2015</b>
<b>Additions</b>	
Contributions	
Member contributions, including state credit	\$ 303,677,304
Grant matching funds	24,445,212
State contribution	311,945,400
Employer/district contributions	392,051,458
Total Contributions	<u>\$ 1,032,119,374</u>
Net investment earnings	
Investment income	\$ 498,764,836
Investment expenses	<u>(69,909,088)</u>
Net Investment Income	\$ 428,855,748
<b>Total Additions</b>	<b>\$ 1,460,975,122</b>
<b>Deductions</b>	
Benefit Payments	\$ 1,201,350,907
Refunds	35,240,176
Administrative Expense	4,358,938
Other	<u>0</u>
<b>Total Deductions</b>	<b>\$ 1,240,950,021</b>
<b>Net Increase in Net Position</b>	<b>\$ 220,025,101</b>
<b>Net Position Restricted for Pensions</b>	
Beginning of Year	<u>\$ 14,229,481,368</u>
End of Year	<u><u>\$ 14,449,506,469</u></u>

*This reconciliation only includes the items needed to reconcile the changes in Net Pension Liability during the fiscal year. The Reconciliation of Fiduciary Net Position required by GASB No. 67 may require additional detail regarding the changes throughout the year.*

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION**  
**SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS**

Fiscal year ending June 30,	<u>2015</u>	<u>2014</u>
<b>Total Pension Liability</b>		
Service Cost	\$ 415,702,261	\$ 409,199,801
Interest	1,538,893,982	1,491,722,137
Benefit Changes	0	0
Difference between actual & expected experience	(159,980,414)	(105,344,633)
Assumption Changes	346,488,630	0
Benefit Payments	(1,201,350,907)	(1,153,051,607)
Refunds	(35,240,176)	(28,718,256)
<b>Net Change in Total Pension Liability</b>	<u>\$ 904,513,376</u>	<u>\$ 613,807,442</u>
<b>Total Pension Liability - Beginning</b>	<u>19,646,619,191</u>	<u>19,032,811,749</u>
<b>Total Pension Liability - Ending (a)</b>	<u><u>\$ 20,551,132,567</u></u>	<u><u>\$ 19,646,619,191</u></u>
<b>Plan Fiduciary Net Position</b>		
Contributions - Employer/State	\$ 728,442,070	\$ 707,052,675
Contributions - Member	303,677,304	301,300,811
Net Investment Income	428,855,748	2,571,707,952
Benefit Payments	(1,201,350,907)	(1,153,051,607)
Refunds	(35,240,176)	(28,718,256)
Administrative Expense	(4,358,938)	(4,282,605)
Other	0	0
<b>Net Change in Plan Fiduciary Net Position</b>	<u>\$ 220,025,101</u>	<u>\$ 2,394,008,970</u>
<b>Plan Fiduciary Net Position - Beginning</b>	<u>14,229,481,368</u>	<u>11,835,472,398</u>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u><u>\$ 14,449,506,469</u></u>	<u><u>\$ 14,229,481,368</u></u>
<b>Net Pension Liability - Ending (a) - (b)</b>	<u>\$ 6,101,626,098</u>	<u>\$ 5,417,137,823</u>
<b>Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	70.31 %	72.43 %
<b>Covered Employee Payroll</b>	\$ 4,338,247,200	\$ 4,304,297,300
<b>Net Pension Liability as a Percentage of Covered Employee Payroll</b>	140.65 %	125.85 %

**Notes to Schedule:**

The covered employee payroll is an estimate of the actual payroll, imputed from individual member contributions, for the fiscal years ending June 30, 2014 and June 30, 2015.

The change in Total Pension Liability resulting from assumption changes in fiscal year ending 2015 is attributable to the new assumptions adopted by the Board in May 2015.

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION**  
**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

FY Ending June 30	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 602,936,966	\$ 707,052,675	\$ (104,115,709)	\$ 4,304,297,300	16.43%
2015	550,652,420	728,442,070	(177,789,650)	4,338,247,200	16.79%

**NOTES TO SCHEDULE OF CONTRIBUTIONS**

**Valuation Date:** June 30, 2015

Notes Actuarially determined contribution rates are calculated as of June 30. Members and employers contribute based on statutorily fixed rates. The State of Oklahoma contributes 5.0% of revenues from sales taxes, use taxes, corporate and individual income taxes, and lottery proceeds. An additional contribution is made for members whose salary is paid from federal funds or certain grant money.

A new set of assumptions and a funding policy were adopted for the June 30, 2015 actuarial valuation and will be first reflected for the Actuarially Determined Contribution determined for the fiscal year ending 2016.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll
Remaining Amortization Period	Amortized over an open 30-year period
Asset Valuation Method	5-year smoothed market
Inflation	3.00%
Salary Increases	Composed of 3.00% inflation, plus 1.00% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.
Investment Rate of Return	8.00%
Retirement Age	Experience-based table of rates based on age, service, and gender. Adopted by the Board in September 2010 in conjunction with the five year experience study for the period ending June 30, 2009.
Mortality	RP-2000 Combined Mortality Table, projected to 2016 using Scale AA, multiplied by 90% for males and 80% for females.



**GOVERNMENTAL EMPLOYER FINANCIAL STATEMENTS****Pension Expense for Fiscal Year Ending June 30, 2015**

To be used for Governmental Employer Reporting for Fiscal Years Ending  
Between June 30, 2015 and June 30, 2016

**Expense**

1. Total service cost	\$ 415,702,261
2. Interest on total pension liability	1,538,893,982
3. Current-period benefit changes	0
4. Member contributions	(303,677,304)
5. Projected earnings on plan investments	(1,134,538,579)
6. Administrative expense	4,358,938
7. Other	0
8. Recognition of beginning deferred outflows (inflows) due to liabilities	13,316,789
9. Recognition of beginning deferred outflows (inflows) due to assets	<u>(184,368,275)</u>
<b>10. Total Pension Expense</b>	<b>\$ 349,687,812</b>

**Recognition of Deferred Outflows and Inflows of Resources**

According to paragraph 33 of GASB No. 68, *differences between expected and actual experience and changes in assumptions* are recognized in pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the 2015 fiscal year, the expected remaining service lives of all employees was 1,034,853 years for OTRS. Additionally, the OTRS plan membership (active employees and inactive employees) was 166,398. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the 2015 fiscal year is 6.22 years.

Additionally, *differences between projected and actual earnings on pension plan investments* should be recognized in pension expense using a systematic and rational method over a closed five-year period.

For this purpose, the deferred outflows and inflows of resources are recognized in the pension expense as a level dollar amount over the closed period identified above.

**GOVERNMENTAL EMPLOYER FINANCIAL STATEMENTS**

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods  
 For Plan Year Ending June 30, 2015  
 To be used for Governmental Employer Reporting for Fiscal Year Ending  
 Between June 30, 2015 and June 30, 2016

**A. New Deferred Outflows and Inflows of Resources by Source Established in Fiscal Year**

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 159,980,414	\$ (159,980,414)
2. Assumption Changes	346,488,630	0	346,488,630
3. Net Difference between projected and actual earnings on pension plan investments	705,682,831	0	705,682,831
<b>4. Total</b>	<b>\$ 1,052,171,461</b>	<b>\$ 159,980,414</b>	<b>\$ 892,191,047</b>

**B. Outflows and Inflows of Resources by Source to be recognized in Current Pension Expense**

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 42,388,779	\$ (42,388,779)
2. Assumption Changes	55,705,568	0	55,705,568
3. Net Difference between projected and actual earnings on pension plan investments	141,136,567	325,504,842	(184,368,275)
<b>4. Total</b>	<b>\$ 196,842,135</b>	<b>\$ 367,893,621</b>	<b>\$ (171,051,486)</b>

**C. Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses**

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 206,267,813	\$ (206,267,813)
2. Assumption Changes	290,783,062	0	290,783,062
3. Net Difference between projected and actual earnings on pension plan investments	564,546,264	976,514,526	(411,968,262)
<b>4. Total</b>	<b>\$ 855,329,326</b>	<b>\$ 1,182,782,339</b>	<b>\$ (327,453,013)</b>

**D. Deferred Outflows and Deferred Inflows of Resources by Year to be recognized in Future Pension Expenses**

Period	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
Fiscal Year + 1	\$ 196,842,135	\$ 367,893,621	\$ (171,051,486)
Fiscal Year + 2	196,842,135	367,893,621	(171,051,486)
Fiscal Year + 3	196,842,135	367,893,621	(171,051,486)
Fiscal Year + 4	196,842,131	42,388,779	154,453,352
Fiscal Year + 5	55,705,568	31,054,227	24,651,341
Thereafter	12,255,222	5,658,470	6,596,752
<b>Total</b>	<b>\$ 855,329,326</b>	<b>\$ 1,182,782,339</b>	<b>\$ (327,453,013)</b>