Gabriel Roeder Smith & Company
Consultants & Actuaries

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

ANNUAL ACTUARIAL VALUATION

AS OF JUNE 30, 2011

GRS

Gabriel Roeder Smith & Company
Consultants & Actuaries

5605 N. MacArthur Blvd.
Suite 870
Irving, TX 75038-2631

469.524.0000 phone
469.524.0003 fax
www.gabrielroeder.com

September 23, 2011

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

Dear Members of the Board:

SUBJECT: ACTUARIAL VALUATION AS OF JUNE 30, 2011

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the Teachers' Retirement System of Oklahoma (the System) as of June 30, 2011. This report was prepared at the request of the Board and is intended for use by the System's staff and those designated or approved by the Board. This report may be provided to parties other than the staff only in its entirety and only with the permission of the Board.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented also comply with the requirements of the Oklahoma statutes and, where applicable, the Internal Revenue Code and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. They are Enrolled Actuaries and Members of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems. They meet all of the Qualification Standards of the American Academy of Actuaries.

ACTUARIAL VALUATION

The primary purposes of the actuarial valuation report are to determine the adequacy of the current State and employer contribution rates, to describe the current financial condition of the System, and to analyze changes in the System's condition. In addition, the report provides information required by the System in connection with Governmental Accounting Standards Board Statement No. 25 (GASB 25), and it provides various summaries of the data.

Valuations are prepared annually, as of June 30th of each year, the last day of the System's plan and fiscal year.

FINANCING OBJECTIVES

The member, employer, State, and "federal matching" contribution rates are established by law. Members contribute 7.00% of covered compensation. The contribution rate for employers covered by the Education Employees Service Incentive Plan (EESIP) is 9.50%. For employers not covered by the EESIP—the comprehensive and regional four-year universities—the contribution rate is 8.55%. No future employer contribution rate changes are currently scheduled. There is also an additional contribution made by the comprehensive universities, the Initial Funding Surcharge, which is equal to 2.50% of the payroll for those employees who elect to join the Alternate Retirement Plan in lieu of joining the System. This contribution will continue through FY 2034 or until June 30th of the year in which the unfunded actuarial accrued liability of the participating institutions is reduced to zero, if earlier. In addition, the State of Oklahoma contributes a percentage of its revenues from sales taxes, use taxes, corporate income taxes, and individual income taxes to the System. This percentage is currently 5.00%. No increases are scheduled in this rate. Additionally, the System receives "federal matching" contributions for positions whose funding comes from federal sources or certain grants. The federal matching contribution rate for FY 2011 was 6.50% and will increase to 7.00% for FY 2012. This federal matching rate is intended to approximate the contribution from the State of Oklahoma measured as a percentage of "State" payroll, i.e., payroll excluding that paid from federal or grant sources.

The State's contribution in FY 2012, based on information presented to the State's Equalization Board, is projected to be $254 million. Therefore, we project that in the fiscal year ending June 30, 2012, the State's contribution plus the federal contribution will be equivalent to a contribution rate of approximately 7.1% of covered payroll. The employer contribution—9.50% for most employers and 8.55% for the comprehensive and regional universities—is projected to average about 9.4% of payroll including the Initial Funding Surcharge, so on a combined basis, the employing entities are expected to contribute 16.5% of covered payroll for FY 2012 (7.1% + 9.4% = 16.5%.)

The State, local and federal contributions, when combined with the contributions made by members, are intended to pay for the normal cost and to amortize the unfunded actuarial accrued liability of the System.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

The unfunded actuarial accrued liability (UAAL) as of June 30, 2010 was $10.414 billion, and it decreased to $7.600 billion this year. As a result, the System's funded ratio—actuarial value of assets divided by the actuarial accrued liability—increased from 47.9% to 56.7% as of June 30, 2011. These improvements were primarily due to the enactment of HB 2132. Prior to this change, the funded ratio would have increased to 48.5% while the UAAL would have been $10.565 billion as of June 30, 2011.

The period required to completely amortize the UAAL based upon the contribution schedule is called "the funding period." Based upon the current statutory contribution schedule, the funding period is 22 years. In the prior valuation, the scheduled contributions were insufficient to amortize the UAAL. This was shown as an "infinite" funding period in the exhibits contained in our June 30, 2010 report and is also shown in this year's report under the prior valuation columns.

Although the FY2011 return on a market value basis was significantly higher than the assumed 8%, the continuing recognition of prior market losses will continue to present somewhat of a "headwind" over the next two years on the actuarial rate of return (a five-year smoothed average of the market value returns.) Prior to HB 2132, the increase in the UAAL was principally due to the recognition of recent prior market asset losses which added approximately $289 million to the UAAL and the negative amortization of the prior year's UAAL. These anticipated increases were partially offset this year by favorable experience resulting primarily from salary increases being less than expected and a 2% COLA not being granted.

Based upon the current contribution schedule, assuming no actuarial gains or losses in the future, the UAAL is expected to continue increasing from the current level until these known deferred asset losses are fully recognized in two years. After that, it is then estimated that the UAAL should trend down to zero over the following 20 years.

DEFERRED ASSET LOSSES/GAINS

The UAAL and the funded ratio cited above are based on actuarial calculations that make use of the actuarial value of assets, not the market value. The actuarial value of assets is based upon the market value, but asset gains and losses – earnings greater or less than the 8.00% annual investment return assumption – are recognized at a rate of 20% per year for five (5) years. The current actuarial value of $9.961 billion is $195 million lower than the market value of $10.156 billion, and the actuarial value of assets is now 98.1% of the market value. The funded ratio determined using the market value of assets rather than the actuarial value is 57.8%.

BENEFIT PROVISIONS

Our actuarial valuation as of June 30, 2011 reflects the benefit and contribution provisions set forth in current statutes. Several bills were passed in the 2011 State of Oklahoma legislative session, although only HB 2132 had a significant cost impact on the current actuarial valuation.

HB 2132 changed the definition of a nonfiscal retirement bill to exclude cost of living adjustments (COLAs) even if such COLAs are assumed in the annual actuarial valuation. Since COLAs are now required to be funded by an additional funding source when they are granted, no assumption for future COLAs is currently included in the liabilities of the System. As shown in the Executive Summary in Section A of our report, this change decreased the unfunded actuarial accrued liability (UAAL) by $2.965 billion as of June 30, 2011.

SB 377 changes the retirement eligibility requirements and early retirement factors for new employees who become members of the System on or after November 1, 2011. However, we believe the language of the bill is unclear in some respects, and it is not entirely clear how to interpret some of the provisions. As a result, we understand the bill's sponsors intend to submit a new bill in the 2012 legislative session to clarify these provisions. Because of this and because the bill would not affect any members in this valuation, we have ignored the bill in this valuation.

ACTUARIAL ASSUMPTIONS AND METHODS

Assumptions are set by the Board of Trustees, taking into account the recommendations of the System's actuary. The System has an experience investigation study performed every fifth year. The actuarial assumptions used in this valuation are based upon the 2009 Experience Investigation Study Report, dated September 15, 2010, measuring the experience investigation period FY2005 – FY2009. The current actuarial assumptions were adopted by the Board in September 2010 and first utilized in the June 30, 2010 actuarial valuation report.

We believe the assumptions are internally consistent and are reasonable, based on the actual experience of the System.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.

DATA

Member data for retired, active, and inactive participants was supplied as of June 30, 2011 by the System's staff. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data. Asset information as of June 30, 2011 was supplied by the auditors and by the System's staff. GRS is not responsible for the accuracy or completeness of the information provided to us.

We wish to thank the System's Executive Director, his staff, and the System's financial auditors for their assistance in the preparation of our report.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

Mark R. Randall

Mark R. Randall, FCA, MAAA, EA
Executive Vice President

J. Christian Conradi

J. Christian Conradi, ASA, MAAA, EA
Senior Consultant

Brad Stewart

Brad Stewart, ASA, MAAA, EA
Consultant

J:\3011\2011\Val\Val_2011.docx

TABLE OF CONTENTS

SECTION A

EXECUTIVE SUMMARY

Executive Summary

Item	2011	2010
Membership		
• Number of		
- Active members	88,085	89,896
- Retirees and beneficiaries	50,829	48,756
- Inactive, vested	7,725	7,439
- Inactive, nonvested	7,498	7,206
- Total	154,137	153,297
• Payroll	$ 3,773 million	$ 3,855 million
Statutory contribution rates	FY 2012	FY 2011
• Employers in EESIP	9.50%	9.50%
• Regional universities	8.55%	8.55%
• Federal/grant salaries	7.00%	6.50%
• Members	7.00%	7.00%
• State (% of tax revenues)	5.00%	5.00%
Assets		
• Market value	$ 10,156 million	$ 8,352 million
• Actuarial value	$ 9,961 million	$ 9,567 million
• Return on market value	22.7%	16.1%
• Return on actuarial value	5.0%	1.7%
• State/local/federal contributions	$ 638 million	$ 621 million
• External cash flow %	-0.8%	-0.4%
• Ratio of actuarial to market value	98.1%	114.5%
Actuarial Information		
• Normal cost %	10.30%	11.83%
• Unfunded actuarial accrued liability (UAAL)	$ 7,600 million	$ 10,414 million
• Funded ratio	56.7%	47.9%
• Funding period (years)	22.0 Years	Infinite
GASB 25 ARC (30 year, level %)	FY 2012	FY 2011
• Dollar amount	$588,287,377	$822,419,996
• Percent of pay	14.87%	20.35%
Gains/(losses)		
• Asset experience	($289) million	($593) million
• Liability experience	329 million	160 million
• Benefit changes	177 million	169 million
• Legislative Changes	2,965 million	0 million
• Assumption Changes	0 million	(358) million
• Total	$ 3,182 million	($622) million

SECTION B

INTRODUCTION

INTRODUCTION

The results of the June 30, 2011 actuarial valuation of the Teachers' Retirement System of Oklahoma are presented in this report.

The purposes of any actuarial valuation report are to describe the financial condition of the System, to assess the adequacy of the current contributions, and to analyze changes in the funding requirements. In addition, this report presents information required by the System in connection with Governmental Accounting Standards Board Statement No. 25 (GASB 25).

Section C of our report discusses the determination of the current funding period. Section D analyzes the changes in the unfunded actuarial accrued liability (UAAL). This section also discusses the gains and losses resulting from differences between actual experience and the actuarial assumptions.

Section E of our report details the System's assets, while Section F discusses the changes in the benefit and contribution provisions since the previous valuation, if any. Section G discusses liabilities calculated for GASB 25 purposes. Sections H and I discuss the actuarial assumptions and methods used and the membership data.

All of the Tables referenced by the other sections appear in Section J of this report. Note that on some of the tables, we have shown results both without and with the 2% COLA assumption, so that comparable figures could be seen.

SECTION C

FUNDED STATUS

FUNDED STATUS

Because the employer contribution rates are set by statute, this report determines the funding period required to amortize the Unfunded Actuarial Accrued Liability (UAAL).

The UAAL decreased by $2.814 billion, from $10.414 billion to $7.600 billion as of June 30, 2011. The funded ratio – the ratio of the actuarial value of assets to the actuarial accrued liability – increased from 47.9% to 56.7% as of June 30, 2011. The funding period – the number of years that would be required under the current contribution schedule to amortize the UAAL – is 22 years. In the prior valuation, the statutory contribution rates were projected to be insufficient to amortize the UAAL, shown as an "infinite" funding period in the Exhibits contained in our report under the prior year's valuation results. Projections show that it will take about fourteen years for the plan to reach 80% funded, assuming the fund earns 8.00% each year, experience follows our assumptions, and no changes are made to the contribution and benefit provisions.

The improvement in the funded status is due mainly to the enactment of HB 2132 described earlier in the cover letter to this report. Other factors helping to improve the funded status included positive experience resulting from salary increases that were smaller than expected and the lack of a 2% COLA being granted for current retirees. The positive experience was partially offset by an asset loss on an actuarial value basis. As discussed in Section E of our report, the asset loss will continue to hinder the funded status of the System as the known asset losses on a market value basis from FY 2008 and FY 2009 are fully recognized over the next two years.

As previously mentioned, this report also determines the GASB Annual Required Contribution (ARC). This is the contribution required to fund the normal cost and to amortize the UAAL as a level percentage of payroll over 30 years. This amount is 14.87% of projected active member payroll as shown in Table 1, compared to 20.35% last year and 20.92% prior to the recognition of HB 2132. As of June 30, 2011, our projections show that the ARC is expected to increase to a little over 15% next year and then it should trend downward towards the annual employer normal cost rate of 3.30% over the next 22 years at which time the UAAL is projected to be zero.

SECTION D

ANALYSIS OF CHANGES

ANALYSIS OF CHANGES

Unfunded Actuarial Accrued Liability (UAAL)

Table 12a of our report shows an analysis of the change in the UAAL. The UAAL, which was $10.414 billion last year, has decreased to $7.600 million this year.

The decrease in the UAAL was primarily due to the enactment of HB 2132 which resulted in a reduction of $2.965 billion. The plan also benefited from positive liability experience including gains of $177 million due to the current retirees not receiving an ad hoc cost-of-living adjustment (COLA) effective July 1, 2011 and $329 million driven mainly by salary increases being less than expected. In the prior valuation, it was assumed that retirees would receive a 2% COLA per annum. Because a COLA was not granted, the System experienced an actuarial gain. These gains were partially offset by an asset loss of $289 million on an actuarial basis.

The rest of the change in the UAAL since the last valuation is due to the negative amortization that occurs because the actual statutory contribution amounts were not sufficient to reduce the UAAL.

Funding Period

As noted in Table 1 under Section K of our report, the funding period (the period required to amortize the UAAL) has improved to 22 years. In the prior valuation, the statutory contribution level was insufficient to amortize the UAAL which is shown as an "infinite" funding period. Again, the primary driver was the enactment of HB 2132. In addition, the funding period benefited from salary gains and from projected state revenue for 2012 that was higher than forecast in the prior valuation.

The funding period shown in Table 1 of our report, and the projection of the UAAL shown in Table 13, are based upon a deterministic projection that phases in the difference between the actuarial and market values of assets. This projection assumes: (a) future market earnings, net of expenses, will equal 8.00% per year, (b) there will be no liability gains/losses or changes in assumptions, (c) the number of active members will remain unchanged, (d) active members who leave employment will be replaced by new entrants each year, (e) the State's contribution for FY 2011 will be $254 million as projected by the Office of State Finance (OSF), and (f) future State revenues will increase at 3.5% per year.

SECTION E

SYSTEM ASSETS

SYSTEM ASSETS

This report contains several tables that summarize key information with respect to the System's assets. Assets are reported at market value as required under GASB 25.

Table 6a summarizes the assets held by class. The total market value of assets increased from $8.352 billion to $10.156 billion as of June 30, 2011. This excludes the value of the Teachers' Deposit Fund. (The Teachers' Deposit Fund is the fund that holds the 403(b) plan assets.) Table 6b shows a comparison of the distribution of assets by category at the current and prior valuation dates. Equity investments increased from 60% to about 65% of total invested assets.

Table 7 reconciles the changes in the fund during the year. Employer contributions decreased slightly from $366.3 million to $364.0 million, due to a decrease in active-member payroll. This decrease occurred despite the fact that the employer contribution rate during the first half of FY 2010 was 0.5% lower than it is now. The contribution rate for the EESIP employers increased from 9.00% to 9.50% effective January 1, 2010. The contribution rate for non-EESIP employers increased from 8.05% to 8.55% effective January 1, 2010. The State's contribution increased from $227.9 million to $251.3 million, reflecting increased State tax revenues. Active member contributions decreased slightly from $290.2 million to $286.6 million, including State credits for contributions.

Table 8 shows the development of the actuarial value of assets. Rather than use the System's market value of assets, the valuation reflects a smoothed asset value. This actuarial value is calculated using a five-year average of the difference between expected and actual earnings and is meant to dampen the volatility in the ARC resulting from the year to year changes in the market returns. The actuarial value is 98.1% of market value.

Table 9a provides a calculation of the estimated investment return for the year. As shown, the approximate investment return for FY 2011 is 22.7% when measured on market value, and 5.0% when measured on actuarial value. Table 9b shows a history of return rates since FYE 1992. The plan's ten-year average market return, net of investment expenses, is 6.5%.

Table 10 shows an external cash flow history. External cash flow is a negative 0.8% of assets this year. Table 11a shows the development of the asset loss of $288.9 million due to the recognition of prior deferred losses. The actuarial value of assets does not recognize $196 million in deferred investment gains which will be recognized over the next 4 years, if not offset by future negative experience.

SECTION F

BENEFIT AND CONTRIBUTION PROVISIONS

BENEFIT AND CONTRIBUTION PROVISIONS

Appendix I of our report provides a summary of benefit and contribution provisions of the System, while Appendix II is a historical summary of legislative changes. There were several bill passed in the 2011 legislative session that impacted the System, two of which will have a material impact on the annual valuation.

HB 2132 changed the definition of a nonfiscal retirement bill to exclude cost of living adjustments (COLA) even if such COLAs are assumed in the annual actuarial valuation. Because COLAs are now required to be funded when they are granted, no assumption for future COLAs is currently included in the liabilities of the System. As shown in the Executive Summary of our report, this change decreased the UAAL by $2,965 million.

SB 377 changes the retirement eligibility requirements and early retirement factors for new employees who become members of the System on or after November 1, 2011. However, we believe the language of the bill is unclear in some respects, and it is not entirely clear how to interpret some of the provisions. As a result, we understand the bill's sponsors intend to submit a new bill in the 2012 legislative session to clarify these provisions. Because of this and because the bill would not affect any members in this valuation, we have ignored the bill in this valuation.

SECTION G

GASB 25 DISCLOSURES

GASB 25 DISCLOSURES

This report includes three tables—Tables 4a, 4b and 4c—showing information required to be reported under GASB 25.

Table 4a shows a history of funding progress. The funded ratio increased from 47.9% as of June 30, 2010 to 56.7% currently. The increase in the funded ratio as of June 30, 2011 occurred primarily due to the passage of HB 2132. In the absence of this legislation, the funded ratio would have increased slightly, to 48.5%.

Table 4b shows the Annual Required Contribution (ARC) as computed under GASB 25, and it shows what percent of this amount was actually received. The ARC is computed as the normal cost plus a 30-year level percent-of-payroll amortization of the UAAL. The 30-year period is re-determined each year (i.e., this is an "open amortization period"). The actual contributions that are compared with the ARC were the contributions received from employers, plus federal matching funds, plus the State's contribution. For FY 2011, the System received 77.6% of its ARC compared with 83.6% for FY 2010. We expect the actual future contributions, made per the statutes, will exceed the ARC beginning with the current year (FY 2012). This will result in the UAAL being amortized in less than 30 years.

In interpreting these schedules, keep in mind that a number of changes that impact comparability have occurred:

- The determination of the ARC was changed from a 40-year level-dollar amortization of the UAAL to a 30-year level-percent of payroll quantity, effective for FY 2006.
- Plan benefit changes were made in most years. See Appendix II of our report.
- Assumptions were changed in 2000, 2005, and 2010 following experience studies.
- Other assumption changes were made in 2001, and in 2006 in connection with the EESIP.
- The assumption with regard to future ad hoc COLAs has been changed several times. No assumption was made prior to 2001. A 1% assumption was used in 2001 and 2002. No assumption was used in 2003, and a 1% assumption was reflected from 2004 to 2007. This assumption was increased to 2% with the June 30, 2008 actuarial valuation. Due to the passage of HB 2132, no future COLAs are assumed beginning with the June 30, 2011 actuarial valuation.

Table 4c shows other information that must be included in the financial report.

SECTION H

ACTUARIAL ASSUMPTIONS AND METHODS

ACTUARIAL ASSUMPTIONS AND METHODS

Appendix III of our report summarizes the actuarial assumptions used to determine the System's liabilities and the actuarial methods used to determine the normal cost, UAAL and funding period. No changes were made to either the actuarial assumptions or methods since the previous valuation, except that, due to the enactment of SB 2132 earlier this year, we eliminated the assumption that future ad hoc COLAs would average 2.00% per year.

The current actuarial assumptions were first used for the June 30, 2010 valuation, when the Board adopted changes recommended by the actuary, based on a review of the System's experience for the five-year period ending June 30, 2009.

SECTION I

MEMBERSHIP DATA

MEMBERSHIP DATA

Data on all members of the System, whether active, receiving a benefit, or entitled to a future benefit, was supplied by the System. See Item V of Appendix III of our report for more information.

We did not verify the correctness of the data at the source, but we did perform various tests to ensure the internal consistency of the data and its overall reasonableness. In our review of this data we encountered a small number of records with missing or inconsistent information. We made adjustments to these records, but this did not materially impact the results shown.

Tables 5a and 5b show some key statistics for the various groups included, and Table 15 shows the distribution of active members by age and service.

There was a 2.0% decrease in the number of active members since the previous valuation and a 2.1% decrease in the payroll for active members.

Membership has grown an average of 0.2% over the last five years and by 0.4% over the last ten years. Payroll for covered members (without regard to the pay caps) has grown an average of 2.4% over the last five years, and it has grown at an average of 2.3% over the last ten years.

Over the last several years, the active group has slowly gotten older. As shown in Table 5b, the average active member is now 46.2 years old, and the average age for the active group has increased 1.5 years during the last ten years. During the same period, the average tenure of members has increased 0.7 years.

SECTION J

TABLES

TABLES

Development of Employer Cost

	June 30, 2011 No COLA Assmptn.	June 30, 2011 2% COLA Assmptn.	June 30, 2010
1. Payroll			
a. Supplied by system	$ 3,773,283,867	$ 3,773,283,867	$ 3,854,772,123
b. Adjusted for one year's pay increase	3,955,490,642	3,955,490,642	4,041,218,473
2. Present value of future pay (paid monthly)	$ 32,453,171,276	$ 32,453,171,276	$ 33,088,687,491
3. Normal cost rate (payable monthly)			
a. Total normal cost rate	10.30%	11.83%	11.83%
b. Less: member rate	-7.00%	-7.00%	-7.00%
c. Employer normal cost rate	3.30%	4.83%	4.83%
4. Actuarial accrued liability for active members			
a. Present value of future benefits for active members	$ 11,206,907,365	$ 13,113,205,063	$ 13,259,608,982
b. Less: present value of future employer normal costs (Item 3c * Item 2)	(1,070,954,652)	(1,567,488,173)	(1,598,183,606)
c. Less: present value of future member contributions	(2,271,721,989)	(2,271,721,989)	(2,316,208,124)
d. Actuarial accrued liability	$ 7,864,230,724	$ 9,273,994,901	$ 9,345,217,252
5. Total actuarial accrued liability for:			
a. Retirees and beneficiaries	$ 9,316,589,138	$ 10,821,719,451	$ 10,216,271,205
b. Inactive members	379,934,590	429,717,709	419,152,135
c. Active members (Item 4d)	7,864,230,724	9,273,994,901	9,345,217,252
d. Total	$ 17,560,754,452	$ 20,525,432,061	$ 19,980,640,592
6. Actuarial value of assets	$ 9,960,576,151	$ 9,960,576,151	$ 9,566,683,405
7. Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 7,600,178,301	$ 10,564,855,910	$ 10,413,957,187
8. Funding period based on statutory contribution rates	22.0 Years	69.6 Years	Infinite
9. GASB 25 ARC			
a. Employer normal cost (Item 1b * 3c)	$ 130,531,191	$ 191,050,198	$ 195,190,852
b. Level % 30-year amortization of UAAL (payable monthly)	457,756,186	636,317,723	627,229,144
c. Total	$ 588,287,377	$ 827,367,921	$ 822,419,996
d. Contributions as percentage of payroll	14.87%	20.92%	20.35%

Actuarial Present Value of Future Benefits

	June 30, 2011 No COLA Assmptn.	June 30, 2011 2% COLA Assmptn.	June 30, 2010
1. Active members			
a. Service retirement benefits	$ 9,943,371,918	$ 11,760,599,710	$ 11,891,480,210
b. Deferred termination benefits	459,505,975	484,315,633	489,970,795
c. Refunds	22,340,427	22,340,427	25,466,552
d. Death benefits	152,486,497	171,795,320	172,362,643
e. Disability retirement benefits	257,261,827	302,213,252	304,256,577
f. Supplemental medical insurance	340,668,099	340,668,099	344,701,752
g. $5,000 post-retirement death benefit	31,272,622	31,272,622	31,370,453
h. Total	$ 11,206,907,365	$ 13,113,205,063	$ 13,259,608,982
2. Retired members			
a. Service retirements	$ 8,288,153,697	$ 9,726,190,939	$ 9,162,838,312
b. Disability retirements	148,941,948	172,690,200	168,242,982
c. Beneficiaries	294,671,199	338,016,018	321,895,153
d. Supplemental medical insurance	503,239,153	503,239,153	485,195,270
e. $5,000 post-retirement death benefit	81,583,141	81,583,141	78,099,488
f. Total	$ 9,316,589,138	$ 10,821,719,451	$ 10,216,271,205
3. Inactive members			
a. Vested terminations	$ 321,841,472	$ 371,624,591	$ 362,075,328
b. Nonvested terminations	28,463,975	28,463,975	26,530,146
c. Suspense fund	29,629,143	29,629,143	30,546,661
d. Total	$ 379,934,590	$ 429,717,709	$ 419,152,135
4. Total actuarial present value of future benefits	$ 20,903,431,093	$ 24,364,642,223	$ 23,895,032,322

Analysis of Normal Cost

	June 30, 2011		June 30, 2010
	No COLA Assmptn.	2% COLA Assmptn.	
1. Gross normal cost rate (payable monthly)			
a. Retirement benefits	7.72%	9.13%	9.13%
b. Deferred termination benefits	1.30%	1.36%	1.36%
c. Refunds	0.59%	0.59%	0.59%
d. Supplemental medical insurance	0.25%	0.25%	0.25%
e. $5,000 Post-retirement death benefits	0.04%	0.04%	0.04%
f. Death Benefits	0.10%	0.11%	0.11%
g. Disability retirement benefits	0.30%	0.35%	0.35%
h. Total	10.30%	11.83%	11.83%
2. Less: member rate	7.00%	7.00%	7.00%
3. Employer normal cost rate	3.30%	4.83%	4.83%

Schedule of Funding Progress
(As required by GASB #25)

Valuation Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
June 30, 1997	$3,544.9	$8,257.2	$4,712.3	42.9%	$2,428.7	194.0%
June 30, 1998	$4,085.0	$8,891.3	$4,806.3	45.9%	$2,537.7	189.4%
June 30, 1999	$4,708.0	$9,458.6	$4,750.5	49.8%	$2,648.4	179.4%
June 30, 2000	$5,373.5	$10,009.2	$4,635.7	53.7%	$2,738.3	169.3%
June 30, 2001	$5,959.0	$11,591.1	$5,632.1	51.4%	$2,990.5	188.3%
June 30, 2002	$6,310.9	$12,275.9	$5,965.0	51.4%	$3,047.1	195.8%
June 30, 2003	$6,436.9	$11,925.2	$5,488.3	54.0%	$3,045.7	180.2%
June 30, 2004	$6,660.9	$14,080.1	$7,419.2	47.3%	$3,030.7	244.8%
June 30, 2005	$6,952.7	$14,052.4	$7,099.7	49.5%	$3,175.2	223.6%
June 30, 2006	$7,470.4	$15,143.4	$7,672.9	49.3%	$3,354.9	228.7%
June 30, 2007	$8,421.9	$16,024.4	$7,602.5	52.6%	$3,598.9	211.2%
June 30, 2008	$9,256.8	$18,346.9	$9,090.1	50.5%	$3,751.4	242.3%
June 30, 2009	$9,439.0	$18,950.9	$9,512.0	49.8%	$3,807.9	249.8%
June 30, 2010	$9,566.7	$19,980.6	$10,414.0	47.9%	$3,854.8	270.2%
June 30, 2011	$9,960.6	$17,560.8	$7,600.2	56.7%	$3,773.3	201.4%

Note : Dollar amounts in millions

Schedule of Employer Contributions
(As required by GASB #25)

Year Ending June 30,	Annual Required Contribution	Percentage Contributed
1997	$446,459,961	62.0%
1998	$446,219,296	59.1%
1999	$456,864,002	53.5%
2000	$455,265,033	60.6%
2001	$451,463,258	72.7%
2002	$556,201,571	65.6%
2003	$585,168,488	61.9%
2004	$534,811,845	70.2%
2005	$722,095,783	56.2%
2006	$535,228,038	85.8%
2007	$575,745,142	93.1%
2008	$590,495,652	101.1%
2009	$714,367,558	86.6%
2010	$742,286,289	83.6%
2011	$822,419,996	77.6%

Notes to Required Supplementary Information
(as required by GASB #25)

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2011
Actuarial cost method	Entry Age Normal
Amortization method	Level percent of payroll, open period
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return *	8.00%
Projected salary increase *	4.00% to 12.00%
* Includes inflation at:	3.00%
Cost of living adjustment	0.00%

Membership Data

			June 30, 2011 (1)	June 30, 2010 (2)
1.	Active members			
	a.	Number	88,085	89,896
	b.	Total payroll supplied by System	$ 3,773,283,867	$ 3,854,772,123
	c.	Average salary	$ 42,837	$ 42,880
	d.	Average age	46.2	46.0
	e.	Average service	11.7	11.5
2.	Vested inactive members			
	a.	Number	7,725	7,439
	b.	Total annual deferred benefits[1]	$ 56,602,747	$ 55,565,627
	c.	Average annual deferred benefit	$ 7,327	$ 7,470
3.	Nonvested inactive members			
	a.	Number	7,498	7,206
	b.	Member contributions with interest due	$ 28,463,975	$ 26,530,146
	c.	Average refund due	$ 3,796	$ 3,682
4.	Service retirees			
	a.	Number	46,853	44,926
	b.	Total annual benefits[1]	$ 882,110,041	$ 831,082,136
	c.	Average annual benefit	$ 18,827	$ 18,499
5.	Special service retirees			
	a.	Number	23	34
	b.	Total annual benefits[1]	$ 53,657	$ 79,383
	c.	Average annual benefit	$ 2,333	$ 2,335
6.	Disabled retirees			
	a.	Number	1,588	1,552
	b.	Total annual benefits[1]	$ 17,742,173	$ 17,276,779
	c.	Average annual benefit	$ 11,173	$ 11,132
7.	Beneficiaries and spouses			
	a.	Number	2,365	2,244
	b.	Total annual benefits[1]	$ 36,878,409	$ 34,629,634
	c.	Average annual benefit	$ 15,593	$ 15,432

[1] Benefit amounts exclude the supplemental medical insurance payment.

Historical Summary of Active Member Data

Valuation as of June 30,	Active Members: Number	Active Members: Percent Increase	Covered Payroll: Amount in $ Millions	Covered Payroll: Percent Increase	Average Salary: $ Amount	Average Salary: Percent Increase	Average Age	Average Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1992	73,568	2.3%	$2,002	4.2%	$27,218	1.9%	43.3	10.6
1993	75,599	2.8%	2,122	6.0%	28,069	3.1%	43.4	10.7
1994	76,280	0.9%	2,190	3.2%	28,704	2.3%	43.6	10.8
1995	79,044	3.6%	2,336	6.7%	29,555	3.0%	43.6	10.7
1996	78,942	-0.1%	2,375	1.7%	30,091	1.8%	44.0	11.1
1997	79,510	0.7%	2,429	2.3%	30,546	1.5%	44.2	11.2
1998	80,578	1.3%	2,538	4.5%	31,493	3.1%	44.3	11.2
1999	81,851	1.6%	2,648	4.3%	32,356	2.7%	44.4	11.2
2000	83,024	1.4%	2,738	3.4%	32,982	1.9%	44.5	11.0
2001	84,387	1.6%	2,991	9.2%	35,438	7.4%	44.7	11.0
2002	85,366	1.2%	3,047	1.9%	35,695	0.7%	44.9	11.1
2003	83,127	-2.6%	3,046	0.0%	36,639	2.6%	45.3	11.5
2004	81,683	-1.7%	3,031	-0.5%	37,104	1.3%	45.6	11.8
2005	84,286	3.2%	3,175	4.8%	37,671	1.5%	45.6	11.6
2006	87,194	3.5%	3,355	5.7%	38,476	2.1%	45.7	11.6
2007	88,133	1.1%	3,599	7.3%	40,835	6.1%	45.8	11.5
2008	88,678	0.6%	3,751	4.2%	42,304	3.6%	45.9	11.5
2009	89,388	0.8%	3,808	1.5%	42,600	0.7%	46.0	11.5
2010	89,896	0.6%	3,855	1.2%	42,880	0.7%	46.0	11.5
2011	88,085	-2.0%	3,773	-2.1%	42,837	-0.1%	46.2	11.7

Plan Net Assets
(Assets at Market or Fair Value)

Item	Valuation as of June 30, 2011	Valuation as of June 30, 2010
(1)	(2)	(3)
1. Cash and cash equivalents	$ 14,348,481	$ 9,646,573
2. Receivables		
a. Employer and member contributions	$ 56,587,607	$ 57,035,454
b. State contribution	27,322,221	23,542,532
c. Net investment income and other accruals	45,636,139	45,625,225
d. Total receivables	$ 129,545,967	$ 126,203,211
3. Investments		
a. Invested cash and other	$ 361,798,249	$ 250,812,377
b. Equities	6,594,609,570	4,985,274,083
c. Fixed income	3,169,219,475	3,068,133,609
d. Real estate, furniture & equipment	874,921	187,847
e. Total investments	$ 10,126,502,215	$ 8,304,407,916
4. Total assets	$ 10,270,396,663	$ 8,440,257,700
5. Liabilities		
a. Benefits payable, including insurance payments	$ 80,477,110	$ 15,999,565
b. Net due to brokers	23,360,148	64,235,927
c. Other liabilities	10,202,235	8,055,866
d. Total liabilities	$ 114,039,493	$ 88,291,358
6. Net assets available (Item 4 - Item 5)	$ 10,156,357,170	$ 8,351,966,342

Distribution of Assets at Market Value
(Percentage of Total Investments)

Item		Valuation as of June 30, 2011	Valuation as of June 30, 2010
(1)		(2)	(3)
a.	Invested cash and other	3.6%	3.0%
b.	Equities	65.1%	60.0%
c.	Fixed income	31.3%	37.0%
d.	Real estate, furniture & equipment	0.0%	0.0%
e.	Total investments	100.0%	100.0%

Reconciliation of Plan Net Assets

	Year Ending June 30, 2011 (1)	Year Ending June 30, 2010 (2)
1. Market value of assets at beginning of year, net of Deposit Fund		
a. Value reported in prior valuation	$ 8,351,966,342	$ 7,226,884,265
b. Prior period adjustments	-	(3)
c. Revised value	$ 8,351,966,342	$ 7,226,884,262
2. Revenue for the year		
a. Contributions		
i. Member contributions, including state credit	$ 286,643,244	$ 290,247,028
ii. Federal matching funds	23,128,795	26,448,892
iii. State contribution	251,322,410	227,926,247
iv. Employer/district contributions	364,025,589	366,282,238
v. Total	$ 925,120,038	$ 910,904,405
b. Net investment earnings		
i. Interest, dividends and other income	$ 288,860,894	$ 268,607,285
ii. Net appreciation/(depreciation)	1,645,516,997	924,683,117
iii. Less: investment expenses	(45,846,053)	(30,811,084)
iv. Net investment earnings	$ 1,888,531,838	$ 1,162,479,318
c. Total revenue	$ 2,813,651,876	$ 2,073,383,723
3. Expenditures for the year		
a. Refunds	35,211,171	$ 30,409,340
b. Benefit payments, including insurance payments	969,310,597	912,912,714
c. Administrative expenses	4,739,280	4,979,589
d. Total expenditures	1,009,261,048	$ 948,301,643
4. Increase in net assets (Item 2 - Item 3)	$ 1,804,390,828	$ 1,125,082,080
5. Market value of assets at end of year, net of Deposit Fund (Item 1 + Item 4)	$ 10,156,357,170	$ 8,351,966,342

Development of Actuarial Value of Assets

				Year Ending June 30, 2011
1.	Market value of assets at beginning of year			$ 8,351,966,342
2.	Net new investments			
	a. Contributions			$ 925,120,038
	b. Benefits paid			(969,310,597)
	c. Refunds			(35,211,171)
	d. Subtotal			(79,401,730)
3.	Market value of assets at end of year			$ 10,156,357,170
4.	Net earnings (3-1-2)			$ 1,883,792,558
5.	Assumed investment return rate			8.00%
6.	Expected return			$ 664,981,238
7.	Excess return (4-6)			$ 1,218,811,320

8. Excess return on assets for last four years :

	Period End (1)	Excess Return (2)	Percent Deferred (3)	Deferred Amount (4)
a.	June 30, 2008	(1,446,413,554)	20%	$ (289,282,711)
b.	June 30, 2009	(2,095,931,855)	40%	(838,372,742)
c.	June 30, 2010	580,645,694	60%	348,387,416
d.	June 30, 2011	1,218,811,320	80%	975,049,056
				$ 195,781,019

9.	Actuarial value of assets (Item 3 - Item 8)	$ 9,960,576,151
10.	Actuarial value as percentage of market value	98.1%

Estimation of Yields

		Year Ending	
		June 30, 2011	June 30, 2010
		(1)	(2)
A.	Market value yield		
1.	Beginning of year market assets	$ 8,351,966,342	$ 7,226,884,262
2.	Net investment income (including realized and unrealized gains and losses)	$ 1,888,531,838	$ 1,162,479,318
3.	End of year market assets	$ 10,156,357,170	$ 8,351,966,342
4.	Estimated dollar weighted market value yield	22.7%	16.1%
B.	Actuarial value yield		
1.	Beginning of year actuarial assets	$ 9,566,683,405	$ 9,438,974,309
2.	Actuarial return	$ 473,294,476	$ 160,126,745
3.	End of year actuarial assets	$ 9,960,576,151	$ 9,566,683,405
4.	Estimated actuarial value yield	5.0%	1.7%

History of Investment Return Rates

Year Ending June 30 of	Market	Actuarial
(1)	(2)	(3)
1992	13.7%	12.0%
1993	13.5%	12.7%
1994	2.0%	6.5%
1995	14.9%	11.2%
1996	14.6%	11.6%
1997	20.9%	13.5%
1998	21.4%	15.8%
1999	11.9%	17.1%
2000	10.5%	15.5%
2001	-2.3%	11.4%
2002	-5.4%	5.8%
2003	4.8%	2.9%
2004	20.2%	4.6%
2005	10.0%	5.7%
2006	9.4%	8.2%
2007	18.0%	12.4%
2008	-7.5%	9.4%
2009	-16.2%	2.0%
2010	16.1%	1.7%
2011	22.7%	5.0%

Average Returns		
Last Five Years:	5.5%	6.0%
Last Ten Years:	6.5%	5.7%
Last Fifteen Years:	8.3%	8.6%
Last Twenty Years:	9.1%	9.2%

History of Cash Flow

		Distributions and Expenditures						
Year Ending June 30,	Contributions	Benefit Payments	Refunds	Administrative Expenses	Total	External Cash Flow for the Year[1]	Market Value of Assets	External Cash Flow as Percent of Market Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	591.5	(561.2)	(26.7)	(3.9)	(591.9)	(0.4)	5,418	0.0%
2003	582.5	(609.0)	(30.2)	(4.0)	(643.2)	(60.7)	5,614	-1.1%
2004	608.4	(647.3)	(33.7)	(3.9)	(684.9)	(76.5)	6,666	-1.1%
2005	640.8	(701.9)	(26.8)	(4.2)	(732.9)	(92.1)	7,238	-1.3%
2006	708.4	(727.4)	(30.9)	(4.4)	(762.7)	(54.3)	7,859	-0.7%
2007	821.3	(767.2)	(33.8)	(4.5)	(805.5)	15.8	9,293	0.2%
2008	883.6	(806.5)	(35.3)	(4.8)	(846.6)	37.0	8,634	0.4%
2009	906.9	(876.3)	(32.1)	(5.2)	(913.6)	(6.7)	7,227	-0.1%
2010	910.9	(912.9)	(30.4)	(5.0)	(948.3)	(37.4)	8,352	-0.4%
2011	925.1	(969.3)	(35.2)	(4.7)	(1,009.2)	(84.1)	10,156	-0.8%

Dollar amounts in millions

[1] Column (7) = Column (2) + Column (6).

Investment Experience Gain or Loss

Item	Year Ending June 30, 2011	Year Ending June 30, 2010
(1)	(2)	(3)
1. Actuarial assets, beginning of year	$ 9,566,683,405	$ 9,438,974,309
2. Contributions during year	$ 925,120,038	$ 910,904,405
3. Benefits and refunds paid	$ (1,004,521,768)	$ (943,322,054)
4. Assumed net investment income at 8%		
a. Beginning of year assets	$ 765,334,672	$ 755,117,945
b. Contributions	37,004,802	36,436,176
c. Benefits and refunds paid	(40,180,871)	(37,732,882)
d. Total	$ 762,158,603	$ 753,821,239
5. Expected actuarial assets, end of year (Sum of items 1 through 4)	$ 10,249,440,278	$ 10,160,377,899
6. Actual actuarial assets, end of year	$ 9,960,576,151	$ 9,566,683,405
7. Asset gain (loss) for year (Item 6 - Item 5)	$ (288,864,127)	$ (593,694,494)

Total Experience Gain or Loss

Item	Year Ending June 30, 2011	Year Ending June 30, 2010
(1)	(2)	(3)
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 10,413,957,187	$ 9,511,974,854
2. Normal cost for the year (employer and employee)	$ 478,076,145	$ 448,367,394
3. Less: total contributions for the year	$ (925,120,038)	$ (910,904,405)
4. Interest at 8 %		
a. On UAAL	$ 833,116,575	$ 760,957,988
b. On normal cost	19,123,046	17,934,696
c. On contributions	(37,004,802)	(36,436,176)
d. Total	$ 815,234,819	$ 742,456,508
5. Expected UAAL (Sum of Items 1 - 4)	$ 10,782,148,113	$ 9,791,894,351
6. Actual UAAL	$ 7,600,178,301	$10,413,957,187
7. Total gain (loss) for the year (Item 5 - Item 6)	$ 3,181,969,812	$ (622,062,836)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (288,864,127)	$ (593,694,494)
9. Liability gain (loss) for the year	328,839,576	160,139,971
10. Ad hoc COLA granted different than assumed	177,316,754	169,222,331
11. Impact of changes in actuarial assumptions and methods	-	(357,730,644)
12. Impact of legislative changes	2,964,677,609	-
13. Total	$ 3,181,969,812	$ (622,062,836)

Analysis of Change in Unfunded Actuarial Accrued Liability (UAAL)

Basis (1)	June 30, 2011 UAAL (in $ Millions) (2)	June 30, 2010 UAAL (in $ Millions) (3)
1. From prior valuation	$ 10,414.0	$ 9,512.0
2. Impact of changes, gains and losses		
a. Expected increase based on expected contributions and passage of time	383.3	259.1
b. Liability (gain)/loss	(328.8)	(160.1)
c. Asset (gain)/loss	288.9	593.7
d. Impact of actual contributions (more)/less than expected under schedule	(15.2)	20.9
e. Ad hoc COLA granted different than assumed	(177.3)	(169.2)
f. Impact of changes in actuarial assumptions and methods	0.0	357.7
g. Legislative changes	(2,964.7)	0.0
h. Total	(2,813.8)	902.1
3. Current UAAL (1+2h)	$ 7,600.2	$ 10,414.0

Columns may not total due to rounding

Analysis of Change in GASB ARC

Basis	June 30, 2011 GASB ARC (Percent of Pay)	June 30, 2010 GASB ARC (Percent of Pay)
(1)	(2)	(3)
1. Prior Valuation GASB 25 Contribution as a percentage of payroll	20.35%	18.62%
2. Increases/(Decreases) due to:		
a. Ad hoc COLA granted different than assumed	-0.27%	-0.25%
b. Impact of changes in actuarial assumptions and methods	0.00%	1.11%
c. Legislative changes	-6.04%	0.00%
d. Asset (gain)/loss	0.44%	0.88%
e. All other plan experience: liability (gain) or loss, differences between actual and expected payroll, differences between actual and expected contributions, etc.	0.39%	-0.01%
f. Total	-5.48%	1.73%
3. Current GASB 25 Contribution as a percentage of payroll	14.87%	20.35%

Projection of UAAL

Valuation Date	UAAL (Millions)
(1)	(2)
June 30, 2011	7,600.2
June 30, 2012	7,998.3
June 30, 2013	8,092.0
June 30, 2014	7,749.4
June 30, 2015	7,503.6
June 30, 2016	7,480.1
June 30, 2017	7,432.4
June 30, 2018	7,357.7
June 30, 2019	7,252.9
June 30, 2020	7,114.6
June 30, 2021	6,938.9
June 30, 2022	6,721.8
June 30, 2023	6,459.0
June 30, 2024	6,145.6
June 30, 2025	5,776.5
June 30, 2026	5,346.0
June 30, 2027	4,848.0
June 30, 2028	4,276.0
June 30, 2029	3,622.8
June 30, 2030	2,880.6
June 30, 2031	2,040.7
June 30, 2032	1,093.8
June 30, 2033	29.7

Solvency Test

Actuarial Accrued Liability and Percent of Active Member Payroll for:

June 30,	Accumulated Member Contributions Including Interest (1)	% of Payroll	Retirees and Beneficiaries Currently Receiving Benefits (2)	% of Payroll	Terminated Employees Not Yet Receiving Benefits (3)	% of Payroll	Employer Financed Portion of Vested and Nonvested Benefits (4)	% of Payroll	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)	(4)
2002	2,934.3	96%	5,959.9	196%	184.9	6%	3,196.8	105%	6,310.9	100%	57%	0%	0%
2003	3,072.8	101%	5,894.0	194%	191.0	6%	2,767.4	91%	6,436.9	100%	57%	0%	0%
2004	3,212.9	106%	6,899.0	228%	284.7	9%	3,683.6	122%	6,660.9	100%	50%	0%	0%
2005	3,381.7	107%	7,046.5	222%	301.4	9%	3,322.9	105%	6,952.7	100%	51%	0%	0%
2006	3,853.7	115%	7,340.0	219%	314.3	9%	3,635.3	108%	7,470.4	100%	51%	0%	0%
2007	4,057.5	113%	7,730.3	215%	331.6	9%	3,905.0	109%	8,421.9	100%	56%	0%	0%
2008	4,323.0	115%	8,919.6	238%	370.1	10%	4,734.2	126%	9,256.8	100%	55%	0%	0%
2009	4,563.9	120%	9,312.4	245%	398.1	10%	4,676.6	123%	9,439.0	100%	52%	0%	0%
2010	4,743.9	123%	10,216.3	265%	419.2	11%	4,601.2	119%	9,566.7	100%	47%	0%	0%
2011	4,931.4	131%	9,316.6	247%	379.9	10%	2,932.9	78%	9,960.6	100%	54%	0%	0%

Note : Dollar amounts in millions

Distribution of Active Members by Age and by Years of Service

	Years of Credited Service												
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Attained Age	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.
Under 25	230	574	302	56	29	13	0	0	0	0	0	0	1,204
	$23,978	$32,226	$31,403	$26,133	$24,847	$26,379	$0	$0	$0	$0	$0	$0	$28,113
25-29	313	1,310	1,515	1,404	1,089	1,264	4	0	0	0	0	0	6,899
	$23,612	$33,920	$35,458	$35,824	$36,413	$37,563	$35,056	$0	$0	$0	$0	$0	$33,404
30-34	238	745	830	919	867	4,100	759	2	0	0	0	0	8,460
	$21,680	$33,911	$36,241	$36,843	$37,346	$40,496	$43,618	$51,612	$0	$0	$0	$0	$36,615
35-39	286	685	770	816	708	2,966	3,282	514	2	0	0	0	10,029
	$19,987	$33,640	$34,561	$36,317	$37,187	$41,695	$46,239	$50,133	$36,573	$0	$0	$0	$39,139
40-44	239	634	761	740	672	2,904	2,691	2,441	725	4	0	0	11,811
	$20,459	$32,784	$33,839	$34,215	$36,978	$41,167	$48,668	$51,962	$51,765	$36,788	$0	$0	$41,671
45-49	181	524	610	625	595	2,549	2,494	1,709	2,266	672	4	0	12,229
	$18,601	$34,552	$32,460	$34,599	$34,183	$39,355	$47,804	$53,570	$54,720	$56,082	$59,892	$0	$43,407
50-54	190	462	489	554	500	2,303	2,478	1,927	1,958	1,940	790	0	13,591
	$17,995	$33,004	$32,222	$33,965	$33,773	$38,913	$47,385	$49,793	$56,807	$57,267	$58,319	$0	$45,114
55-59	142	306	385	435	413	1,748	2,093	1,747	2,065	1,276	1,571	494	12,675
	$19,049	$34,009	$35,766	$34,438	$39,151	$40,462	$46,544	$49,824	$53,805	$61,853	$62,738	$63,243	$47,774
60-64	76	170	224	268	254	1,090	1,188	1,136	1,283	909	663	885	8,146
	$20,326	$31,677	$31,362	$33,975	$36,564	$39,841	$49,661	$50,710	$54,166	$60,023	$73,321	$69,525	$50,117
65 & Over	60	80	95	100	126	508	430	378	399	282	220	363	3,041
	$13,745	$25,120	$25,148	$32,352	$28,739	$33,605	$47,426	$54,307	$57,680	$66,023	$79,554	$95,174	$51,545
Total	1,955	5,490	5,981	5,917	5,253	19,445	15,419	9,854	8,698	5,083	3,248	1,742	88,085
	$20,732	$33,366	$34,173	$35,209	$36,214	$40,022	$47,307	$51,288	$54,776	$59,224	$64,959	$73,088	$42,837

APPENDICES

SUMMARY OF PLAN PROVISIONS

1. <u>Effective Date</u>: July 1, 1943.

2. <u>Plan Year</u>: Twelve-month period ending June 30th.

3. <u>Administration</u>: The System is administered by a Board of Trustees, which is responsible for administration of the System and investment of System assets. Three members serve ex officio, while a total of ten others are appointed by the Governor (six), the President of the Senate (two), and the Speaker of the House (two), according to various guidelines.

4. <u>Type of Plan</u>: The System is a qualified governmental defined benefit retirement plan. For GASB purposes, it is a cost-sharing multiple-employer PERS.

5. <u>Eligibility</u>: All employees of any public school in Oklahoma, including public colleges and universities, are eligible to participate in the System. Classified personnel (teachers, supervisors, principals, registered school nurses, administrators, etc.) are required to participate, beginning at their date of employment. Non-classified employees (all other employees, such as drivers, secretaries, janitors, cooks, etc.) may, but are not required to, participate. Certain other State employees, such as employees of the System itself, participate in the System. Beginning July 1, 2004, new employees hired by the comprehensive universities (Oklahoma University, the Health Sciences Center, and Oklahoma State University) may elect to join an alternate plan provided by the universities in lieu of joining OTRS. The election to join the alternate plan is irrevocable.

6. <u>Maximum Pay</u>: Prior to July 1, 1995, contributions under this system were based on pay up to a maximum dollar amount. Members could choose between a $40,000 maximum and a $25,000 maximum. The member's Final Average Compensation was limited by this same maximum, so the member's election affected both benefits and contributions.

The maximum was removed for most members effective July 1, 1995. It no longer applies in determining the required member and employer contributions. It does still have an impact, however. As noted below, benefits based on service earned before July 1, 1995 are limited by the $40,000 or $25,000 maximum, whichever was elected. This cap may be modified for members in the Education Employees Service Incentive Plan (EESIP). See item 22 below discussing the EESIP provisions.

In addition, the cap on salary continued to apply after June 30, 1995 to members employed by one of the comprehensive universities who entered the system before July 1, 1995. The cap on salary for contribution purposes is shown in the schedule below. All caps were removed effective July 1, 2007.

	Elected $40,000 Maximum	Elected $25,000 Maximum
1995/1996	$44,000	$27,500
1996/1997	49,000	32,500
1997/1998	54,000	37,500
1998/1999	59,000	42,500
1999/2000	59,000	42,500
2000/2001	64,000	47,500
2001/2002	69,000	52,500
2002/2003	74,000	57,500
2003/2004	79,000	62,500
2004/2005	84,000	67,500
2005/2006	89,000	72,500
2006/2007	94,000	77,500
Thereafter	No limit	No limit

Benefits for the members employed by the comprehensive universities, except for those hired on or after July 1, 1995, are limited by the pay caps for the period before July 1, 2007.

7. Member Contributions: Generally, active members contribute 7.00% of all compensation to the System. A school district may pay all or part of the contribution for its employees.

8. Employer Contributions: Employers are required to contribute a fixed percentage of pay on behalf of active members. The employer contribution rate is now applied to all pay, although historically the rate was not applied to pay above the cap on salary.

The employer contribution rate for years from July 1, 2002 through December 31, 2006 was 7.05% of covered salary. Effective January 1, 2007, the employer contribution rate paid by all employers covered by the EESIP increased to 7.60%. This rate then increased to 7.85% effective July 1, 2007, 8.35% effective January 1, 2008, 8.50% effective July 1, 2008, 9.00% effective January 1, 2009, and 9.50% effective January 1, 2010. For employers not covered by the EESIP—the comprehensive and regional four-year universities—the rate increased to 7.55% effective January 1, 2008, 8.05% effective January 1, 2009, and 8.55% effective January 1, 2010.

In addition, the State of Oklahoma contributes 5.00% percent of revenues from sales taxes, use taxes, corporate income taxes and individual income taxes. The 5.00% rate became effective on July 1, 2007. The rates are shown in the following schedule on the next page.

Fiscal Year	State Contribution Percentage
FY 2003	3.54%
FY 2004	3.54%
FY 2005	3.75%
FY 2006	4.00%
FY 2007	4.50%
FY 2008	5.00%
Thereafter	5.00%

Beginning in FY 2006, the State also contributes 5.0 % of lottery proceeds.

If a member's salary is paid from federal funds or certain grant money, an additional contribution (the federal matching contribution) is required. The federal contribution rate is set by the Board of Trustees annually, and is intended to approximate the state's contribution, expressed as a percentage of non federal/grant salaries.

Fiscal Year	Federal/Grant Contribution Percentage
FY 2003	5.00%
FY 2004	4.50%
FY 2005	4.50%
FY 2006	5.00%
FY 2007	7.00%
FY 2008	7.00%
FY 2009	7.50%
FY 2010	7.50%
FY 2011	6.50%

9. Service: Employees receive credit for a year of service if they are contributing members for at least six months within one school year. Credit may also be granted for service prior to the System's effective date, and non-classified employees can purchase credit for their prior service once they have joined the System. Credit is also available for some out-of-state and military service under certain circumstances. Finally, members receive a year of service credit if they have accumulated 120 days of unused sick leave at termination.

10. Final Average Compensation (FAC): The average of the member's compensation for the three or five years on which the highest contributions are paid. For persons becoming members before July 1, 1992, the averaging period is three years. For other members, the averaging period is five years. For service prior to July 1, 1995, the FAC is limited to $40,000 or $25,000, depending on the member's election and participation in the EESIP as discussed in Item 6 above and in Item 22.

11. Normal Retirement

a. Eligibility: A member is eligible to retire and receive a Normal Retirement benefit if (i) the member is at least age 62 and has credit for 5 or more years of service, or

(ii) the sum of the member's age and service is at least 80 (Rule of 80). (For members joining after June 30, 1992, a "Rule of 90" is used instead of the "Rule of 80".)

b. Monthly Benefit: 2% of FAC (limited to $40,000 or $25,000, as appropriate) times years of service prior to July 1, 1995, plus 2% of FAC (unlimited) times years of service after June 30, 1995. Special provisions apply to members covered by the EESIP (see Item 22 below.) Other special provisions apply to higher education members for service during the period July 1, 1995 through June 30, 2007 if their pay in any year in this period exceeded the applicable maximum. Monthly benefits are equal to one-twelfth of the calculated amount.

c. Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments made do not exceed the member's accumulated contributions, determined as of the date of retirement, the balance will be paid in a lump-sum to the member's beneficiary. Optional forms of payment are available; see below.

12. Early Retirement

a. Eligibility: A member may retire early after reaching age 55 with credit for five years of service, or at any age after 30 years of service.

b. Monthly Benefit: The normal retirement benefit (based on current years of service) multiplied by the early retirement factor below.

c. Early Retirement Factor:

Retirement	Factor
62 or later	1.0000
61	.9333
60	.8666
59	.8000
58	.7523
57	.7038
56	.6595
55	.6189
54	.5817
53	.5474
52	.5159
51	.4868
50	.4598
49	.4349
48	.4117
47	.3902

d. Payment Form: Same as for Normal Retirement above.

13. Disability Retirement

a. Eligibility: A member is eligible provided (i) he/she has credit for at least 10 years of service and (ii) the disability is approved by the Medical Board appointed by the Board of Trustees.

b. Monthly Benefit: Same as for Normal Retirement above (based on current service).

c. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits are reduced or cease entirely upon recovery or reemployment prior to age 60. Disability benefits are payable as a monthly life annuity, with a guarantee that if the payments made do not exceed the sum of the member's accumulated contributions as of the date of retirement, the balance will be paid in a lump-sum to the member's beneficiary. A married, disabled member may elect a reduced benefit under the Joint & 100% Survivor option (with pop up) form of payments (Option 2 described in item 17 below). The reduction factor is determined using a disabled-life mortality table for the retiree.

14. Vested Termination Benefit

a. Eligibility: A member with at least 5 years of service who does not withdraw his/her contributions from the fund is eligible for a vested termination benefit.

b. Monthly Benefit: Same as for Normal Retirement above (based on current service). If benefits commence prior to age 62, they may be reduced as for Early Retirement above.

c. Payment Form: Benefits commence at age 62, or optionally as early as age 55. The form of payment is the same as for Normal Retirement above.

15. Withdrawal (Refund) Benefit

a. Eligibility: All members leaving covered employment with less than 5 years of service for a reason other than the member's death. Optionally, members eligible for other benefits may withdraw their contributions in lieu of the regular benefits due.

b. Benefit: The member who withdraws receives a lump-sum payment of his/her employee contributions, plus a portion of the interest credited by the System on these contributions. Interest is credited at an annual rate of 8%. The portion of the interest paid on termination depends on the member's years of service as follows:

Years of Service	Percent of Interest Refunded
0-15	50%
16-21	60%
22-25	75%
26 or more	90%

16. Death in Service

a. Eligibility: Death must have occurred while an active member

b. Benefit: Upon the death of an active member, a refund of the member's contributions and 100% of the interest credited is paid. In addition, a lump sum of $18,000 will be paid. If the member is eligible for retirement (early or normal) at the time of death, and the member is married, the spouse may elect to receive a monthly life annuity equal to the retirement benefit for which the member was eligible, reduced as though the member had elected to receive benefits under Option 2 (see below). This annuity is paid in lieu of both (i) the $18,000 lump-sum death benefit and (ii) the refund of contributions.

The spouse of an EESIP eligible member can elect to receive the enhanced benefit described under Item 22 below.

17. Optional Forms of Payment: There are optional forms of payment available on an actuarially equivalent basis, as follows:

a. Option 1 - A modified cash refund annuity payable for life with a guaranteed refund of the member's contributions and interest, less the total of the "annuity" payments paid. (The "annuity" payment is the portion of the monthly benefit provided by the member's own account balance.)

b. Option 2 - A joint life annuity payable while both the member and the joint annuitant are alive; and if the member dies before the joint annuitant, continuing without change to the joint annuitant; or if the joint annuitant dies before the member, "popping-up" to the original life annuity amount and continuing for the life of the member.

c. Option 3 - A joint life annuity payable while both the member and the joint annuitant are alive; and if the member dies before the joint annuitant, continuing at 50% of this amount for the joint annuitant's lifetime; or if the joint annuitant dies before the member, "popping-up" to the original life annuity amount and continuing for the life of the member.

d. Option 4 - A life annuity with a guarantee that if the member dies before 120 payments (10 years) have been made; the payments will be continued to the member's beneficiary for the balance of the ten-year period.

e. PLSO Option - A partial lump-sum option (PLSO) is allowed for those members with at least 30 years of service upon retirement. The amount of the PLSO is equal to 12, 24, or 36 times the member's monthly retirement benefit, determined before applying any reduction for the PLSO or any other optional form of payment. A member who elects to receive a PLSO will have his/her monthly retirement benefit reduced on an actuarial basis to compensate for the fact that a PLSO is provided. A member who elects a PLSO may elect any of the other optional forms of payment as well, taking a further reduction in the annuity amount.

Actuarial equivalence is based on tables adopted by the Board of Trustees.

18. Special Retirees: This is a group of retirees who have been granted a special $150 per month benefit although they did not fulfill the requirements for service retirement. With cost of living increases, the special retirees now average $194 per month.

19. Supplemental Medical Insurance

a. Eligibility: All retired members (including service retirees and disabled retirees but excluding the special retirees and spouses or beneficiaries) who have at least 10 years of service credit are eligible for a supplemental medical insurance payment.

b. Monthly Benefit: Eligible members receive the smaller of (i) a Medicare supplement benefit, if eligible, or (ii) an amount between $100 and $105 per month, depending on service and Final Average Compensation.

c. Payment Form: Benefits are payable as a life annuity on behalf of the retired member to (i) the Oklahoma Employees' Group Insurance plan, if the member has health coverage under this plan, or (ii) to the member's former employer, if the member retains health coverage under a plan maintained by the former employer.

20. Post-retirement Death Benefit

a. Eligibility: All retired members (including service retirees and disabled retirees but excluding the special retirees and spouses or beneficiaries) are eligible for a post-retirement death benefit.

b. Benefit: A lump-sum payment of $5,000.

21. Cost-of-living Increase: From time to time, the System has been amended to grant certain post-retirement benefit increases. However, the System has no automatic cost-of-living increase features.

22. EESIP: The Education Employees Service Incentive Plan (EESIP) was created in 2006. Active members are eligible for the EESIP if they have service prior to July 1, 1995, are active on or after July 1, 2006, and are not employed by one of the comprehensive or regional four-year universities.

The EESIP allows for two years of service prior to July 1, 1995 to be computed at an enhanced or eliminated cap for each year that the employee has worked beyond Normal Retirement Age at the time of retirement.

For each "uncapped" year, the $40,000 cap applicable to service before July 1, 1995 is increased to $60,000 for retirements in FY 2007, to $80,000 for retirements in FY 2008, and the cap is removed beginning July 1, 2008. The employee that elects the enhanced benefit must pay the accumulations, at 10% interest, of contributions that would have been required but for the cap then in place. Payment is required only for years FY 1988 through FY 1995 even if more than 8 years of service prior to July 1, 1995 are being "uncapped." Payment is required only for those years of service that are computed at an elevated or eliminated cap.

Contributions are required at the following rates for salary in excess of the $25,000 or $40,000 cap earned in years FY 1998 through FY 1995:

Fiscal Year	Contribution Percentage
FY 1995	8.00%
FY 1994	9.00%
FY 1993	11.00%
FY 1992	11.00%
FY 1991	11.00%
FY 1990	10.50%
FY 1989	10.00%
FY 1988	10.00%

For those members electing the enhanced benefit, the payment required is 50% of the accumulated balance in FY 2007, 75% of the accumulated balance in FY 2008 and 100% of the accumulated balance on or after FY 2009.

.

HISTORY OF MAJOR LEGISLATIVE CHANGES

1990 Legislative Session

1. An ad hoc benefit increase was granted to retirees and beneficiaries who had been receiving benefits for at least one year. Special retirees were not granted this increase. The increase was determined by adding an amount to the Final Average Compensation for the member, and then re-determining the benefit due. For classified members, the amount added was $950, while for non-classified members, the amount added was $475. In all cases, Final Average Compensation was capped at $40,000.

2. The local employer contribution rate was increased from 1.0% of covered compensation in accordance with the following schedule:

Year Beginning July 1	Local Employer Contribution Rate
(1)	(2)
1990	1.0%
1991	1.5%
1992	2.0%
1993	2.5%

1991 Legislative Session

No changes.

1992 Legislative Session

SB 568 made the following changes:

- Increased employer rates (grading from 7% for 1992/1993 to 18% for 2004/2005) and changed State contributions to offset for employer contributions.
- Eliminated the salary cap effective July 1, 1995.
- Changed the member contribution rate to 7% (after July 1, 1997, phased in prior to that date).
- Changed the FAC averaging period to five years for new members.
- Eliminated the $18,000 death benefit (and the optional survivor annuity) for new members.

- Changed the formula to cap FAC with the member's pay cap for service prior to July 1, 1995.

- Changed the Rule of 80 to the Rule of 90 for new members.

1993 Legislative Session

SB 535 set forth a schedule which reduces the maximum payment for supplemental medical insurance from $75/month to an amount between $70 and $75 per month, depending on service and Final Average Compensation.

1994 Legislative Session

1. HB 2228 provided for an ad hoc COLA payable to members receiving benefits. The average increase is about 2.5%.

2. SB 768 changed the System's joint options to "pop-up" options. This change was and to $48,000 and $30,000 for 1996-97. The member contribution rate for these made for both current and future retirees. Under a pop-up option, if the joint annuitant predeceases the member, the member's benefit is increased to the amount it would have been if the member had elected a life only annuity.

3. SB 767 provided for the transfers of service credit between this System and the Oklahoma Public Employees Retirement System.

4. SB 615 provides that the local employer's contribution rate shall not be less than the local employer's contribution rate for the prior year.

1995 Legislative Session

SB 527 modified the provisions affecting members employed in higher education who became members prior to July 1, 1995. For these members, the $40,000 and $25,000 pay caps were left in place for two additional years, but were indexed to $44,000 and $27,500 for 1995-96 members was set to 6.0% for 1995-96 and 6.5% for 1996-97. The benefit provisions were also modified so that only pay up to the maximum would be recognized for these years. After June 30, 1997, these members will contribute 7% of total pay like all other members. In addition, SB 527 modified the SB 568 employer contribution rate schedule. The new employer rates are 50 basis points lower in each year until the rate reaches 18.00%.

1996 Legislative Session

SB 832 modified the provisions relating to (i) member contributions, (ii) maximum compensation, and (iii) the benefit formula, for members employed in higher education. Beginning July 1, 1995, all members will contribute on all pay, except for members employed by a comprehensive university who became a member before July 1, 1995, whose recognized compensation is limited to

	For members who elected the $25,000 limit prior to June 30, 1995	For all other members
1996-97	$32,500	$49,000
1997-98	37,500	54,000
1998-99	42,500	59,000
1999-00	47,500	64,000
2000-01	52,500	69,000
thereafter	no limit	no limit

Employer contributions will be based on the same compensation as member contributions. In 1996-98, member contributions will be 6.5% of pay up to $25,000 plus 7% of pay in excess of $25,000, up to the maximum recognized compensation. The benefit formula was also adjusted so that for service earned between July 1, 1995 and June 30, 2001, members in higher education have their benefits adjusted for the compensation limits.

1997 Legislative Session

The post-retirement death benefit was increased from $4,000 to $5,000.

1998 Legislative Session

1. An ad hoc benefit increase was granted to retirees and beneficiaries who had been receiving benefits for at least one year. The increase was determined by adding an amount to the Final Average Compensation for the member, and then redetermining the benefit due. For classified members, the amount added was $1,400, while for non-classified members, the amount added was $700. Special retirees received a 5.4% increase.

2. The funding mechanism was changed, eliminating the state's contribution of 78% of its Gross Production Tax receipts after the 1999 fiscal year and substituting a contribution based on a percentage of general revenue available for appropriation (95% of general revenue). The percentage is 3.25% for the fiscal year ending June 30, 2000, and 3.50% thereafter. The local employer's contribution rates were revised for years after the 1999 fiscal year as follows:

Year	Employer Rate
1999/2000	4.80%
2000/2001	5.80%
2001/2002	6.80%
Thereafter	7.05%

1999 Legislative Session

1. The pay caps applicable to certain members employed by one of the comprehensive universities were extended to FY 2007. The cap in effect for FY 1999 was left unchanged for FY 2000, and then will be increased $5,000 each year thereafter. This change affects both contributions and benefit calculations for these members.

2. The state's funding mechanism was changed again. Now the state's annual contribution will be 3.54% of certain specified sales and income tax revenues. This amount is subject to a $136.0 million maximum contribution for FY 2000 only.

2000 Legislative Session

1. An ad hoc benefit increase was granted to retirees and beneficiaries who had been receiving benefits for at least one year. The increase was determined by adding an amount to the Final Average Compensation for the member, and then redetermining the benefit due. For classified members, the amount added was $500, while for non-classified members, the amount added was $250. Special retirees received a 1.8% increase.

2. SB 994 set forth a schedule which increases the maximum payment for supplemental medical insurance by $30/month from an amount between $70 and $75 per month to an amount between $100 and $105 per month, depending on service and Final Average Compensation.

2001 Legislative Session

No changes.

2002 Legislative Session

1. An ad hoc benefit increase was granted to retirees and beneficiaries, beginning July 1, 2002, if they had been receiving benefits for at least one year. Retirees were given a 3% increase if they had less than 30 years of credited service and a 4% increase if they had 30 or more years of credited service. Special retirees received a 3% increase.

2. The State's contribution is equal to a percentage of the State's revenue from certain sales and income taxes. The percentage is currently 3.54%, but a bill was passed to increase the percentage over the next five years to 5.00%, according to this schedule.

FY 2003	3.54%
FY 2004	3.54%
FY 2005	3.75%
FY 2006	4.00%
FY 2007	4.50%
FY 2008	5.00%

2003 Legislative Session

1. The service requirement for vesting was changed from ten years to five years. Under this provision, a member is now able to retire with an unreduced retirement benefit after reaching age 62 with credit for 5 or more years of service. A member who has reached age 55, but not age 62, with at least 5 years of service, is able to retire and receive a reduced retirement benefit. A member who has terminated before being eligible to retire, but who has at least 5 years of service, may elect a deferred retirement benefit in lieu of a refund. However, members must still have credit for at least 10 years of service in order to be eligible for a disability benefit or the medical insurance premium supplement.

2. Refunds for members who have less than seven years of service will receive their contributions plus 50% of the interest on their account. Previously members with less than seven years of service received no interest. Interest is computed at 8.00%

3. A partial lump-sum option (PLSO) was added. Members who retire with at least 30 years of service may elect a PLSO equal to 12, 24, or 36 times the member's monthly retirement benefit, determined before applying any reduction for the PLSO or any other optional form of payment. A member who elects to receive a PLSO will have his/her monthly retirement benefit reduced on an actuarial basis to compensate for the fact that a PLSO is provided.

4. Disabled members may now elect Option 2—the Joint & 100% Survivor option (with pop up).

2004 Legislative Session

1. An ad hoc benefit increase was granted to retirees and beneficiaries, beginning August 1, 2004, if they had retired on or before June 30, 2003. Special retirees received a 4.0% increase, and increases for other eligible retirees are as follows:

Years of Service	Monthly Benefit at 6/30/04	Benefit Increase
20 Years or more	Less than $1,500.00	4.5%
	$1,500.00 to $2,500.00	4.0%
	Over $2,500.00	3.5%
15 to 19 Years	Less than $1,000.00	4.0%
	$1,000.00 to $2,000.00	3.5%
	Greater than $2,000.00	3.0%
Fewer than 15 years	Less than $801.00	3.5%
	$801.00 to $1,499.99	3.0%
	$1,500.00 or greater	2.5%

2. Members who joined TRS on or after July 1, 1992 receive a year of service credit if they have accumulated 120 days of unused sick leave. Previously, this additional service was only available to members hired prior to July 1, 1992.

3. Beneficiaries of members hired on or after July 1, 1992 are eligible to receive an $18,000 lump sum death benefit in addition the member's contribution balance with 100% of credited interest. If the member was eligible for early or normal retirement, the beneficiary may choose the retirement benefit for which the member was eligible in lieu of the contribution balance and $18,000 lump sum. Previously, the annuity option and $18,000 lump sum had only been available to members hired before July 1, 1992.

4. The benefit formula for members hired in FY 1996 at any of the colleges or universities in the Oklahoma State System of Higher Education is 2.0% of final average salary, computed at retirement, for each year of service. Previously, the formula was 2.0% of salary for service in FY 1996 plus 2.0% of final average salary, computed at retirement, for each year of service earned after June 30, 1996.

5. Employees hired by one of the comprehensive universities – Oklahoma University, the Health Sciences Center, and Oklahoma State University – after June 30, 2004 may make an irrevocable election to join an alternate plan established by the universities in lieu of becoming a member of OTRS.

6. The Board of Trustees is required to adopt an assumption as to the level of probable future ad hoc cost-of-living adjustments that will be granted by the legislature in the future.

7. The supplemental medical insurance credit is restricted to members who retire with at least 10 years of service credit.

8. The formula used to determine benefits accrued for service earned between July 1, 1995 and June 30, 2007, for members employed by a comprehensive university, is modified. Retirees who had service at a comprehensive university after June 30, 1995 will receive a benefit increase because of this formula change, effective as of January 1, 2005. No retroactive increase will be paid to such retirees.

9. Members who are employed by a comprehensive university before July 1, 2004 will be given a future opportunity to make a one-time irrevocable election to leave OTRS and join an alternative plan established by the universities. The timing of the election depends on if and when IRS approval is received.

10. The comprehensive universities will make additional contributions to OTRS on behalf of members in their alternative plan.

2005 Legislative Session

No Changes.

2006 Legislative Session

1. The Education Employees Service Incentive Plan (EESIP) was created:

   Active members are eligible for the EESIP if they have service prior to July 1, 1995, are active on or after July 1, 2006, and are not employed by one of the comprehensive or regional four-year universities.

   The EESIP allows for two years of service prior to July 1, 1995 to be computed at an enhanced or eliminated cap for each year that the employee has worked beyond Normal Retirement Age at the time of retirement.

   For each "uncapped" year, the $40,000 cap applicable to service before July 1, 1995 is increased to $60,000 for retirements in FY 2007, to $80,000 for retirements in FY 2008, and the cap is removed beginning July 1, 2008. The employee that elects the enhanced benefit must pay the accumulations, at 10% interest, of contributions that would have been required but for the cap then in place. Payment is required only for years FY 1988 through FY 1995 even if more than 8 years of service prior to July 1, 1995 are being "uncapped." Payment is required only for those years of service that are computed at an elevated or eliminated cap.

   For those members electing the enhanced benefit, the payment required is 50% of the accumulated balance in FY 2007, 75% of the accumulated balance in FY 2008 and 100% of the accumulated balance on or after FY 2009.

2. The employer contribution rate was increased for employers covered by the EESIP. The rate increased from 7.05% to 7.60% effective Jan. 1, 2007, and then to 7.85% for FY 2008 and to 8.00% for FY 2009. The employer contribution rate for the employers not covered

by the EESIP—the comprehensive and regional four-year universities—remained at 7.05%.

3. A 2.00% ad hoc cost-of-living adjustment (COLA) was provided, effective July 1, 2006. All retirees who retired before July 1, 2005 were eligible, including disabled retirees, special retirees and beneficiaries receiving payments.

2007 Legislative Session

The employer contribution rates, beginning July 1, 2007, were increased as shown in the following schedule. Different rates are paid by employers in the Education Employees Service Incentive Plan (EESIP) and those not in EESIP (the comprehensive and regional four-year universities):

	Employer Contribution Rates	
Period:	EESIP Employers	Non-EESIP Employers
7/1/2006 – 12/31/2006	7.05%	7.05%
1/1/2007 – 6/30/2007	7.60%	7.05%
7/1/2007 – 12/31/2007	7.85%	7.05%
1/1/2008 – 6/30/2008	8.35%	7.55%
7/1/2008 – 12/31/2008	8.50%	7.55%
1/1/2009 – 6/30/2009	9.00%	8.05%
7/1/2009 – 12/31/2009	9.00%	8.05%
1/1/2010 – 6/30/2010	9.50%	8.55%
FY 2011 and later	9.50%	8.55%

2008 Legislative Session

A 2.00% ad hoc cost-of-living adjustment (COLA) was provided, effective July 1, 2008. All retirees who retired before July 1, 2007 were eligible, including disabled retirees, special retirees and beneficiaries receiving payments.

2009 Legislative Session

No Changes.

2010 Legislative Session

1. HB 1935 allows a retiree electing one of the optional benefit forms (i.e. not life only) to make a one-time irrevocable change in the benefit option within 60 days of retirement. The beneficiary may not be changed.

2. SB 859 allows a retiree who chose a life annuity at retirement to change to Retirement Option 2 or 3 (100% joint survivor annuity and 50% joint survivor annuity respectively) within a year of marriage.

2011 Legislative Session

1. SB 377 changes the eligibility conditions for both normal and early retirement for members hired on or after November 1, 2011. Members will be eligible for normal retirement at the earlier of age 65 with 5 years of service or when their age plus service equals 90 (rule of 90) with a minimum age of 60. Members will be eligible for early (reduced) retirement at age 60 with 5 years of service.

2. HB 2132 changes the definition of a nonfiscal retirement bill to exclude cost of living adjustments (COLA) even if such COLAs are assumed in the annual actuarial valuation.

3. SB 782 eliminates the requirement that statewide retirement systems report a second set of actuarial valuation results to the Oklahoma State Pension Commission using specified actuarial assumptions.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

I. *Valuation Date*

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. *Actuarial Cost Method*

Because the employer contribution rate is set by statute, the actuarial valuation is used to determine the funding period--the number of years required to amortize the Unfunded Actuarial Accrued Liability (UAAL). It is also used to calculate the Annual Required Contribution (ARC) as defined by GASB 25.

The actuarial valuation uses the Entry Age actuarial cost method. Under this method, a normal cost rate is first determined. This is the contribution rate (level as a percentage of pay) required to provide the benefits of the average new member. The normal cost rate consists of two pieces: (i) the member's own contribution rate, and (ii) a portion of the employer contribution rate. This second piece is called the employer normal cost rate.

The total normal cost is determined by dividing the present value of future benefits for a hypothetical group of new members by the present value of their future pay. In calculating the benefits for this group, all changes in provisions or member contribution rates scheduled to occur in the future are assumed to already be in effect. The hypothetical group of new entrants was reset in the 2010 experience study, based on actual new members joining during FY 2005 through FY 2009.

Next, the UAAL is determined. This is the liability for future benefits which is in excess of (i) the actuarial value of assets, and (ii) the present value of future normal costs. The employer contribution that is not used for the employer normal cost is applied to amortize the UAAL.

The funding period is calculated as the number of years required to fully amortize the UAAL, assuming that the System's payroll increases at the payroll growth rate and the State's contribution increases at the State's revenue growth rate. Both employer and member contributions are assumed to be made monthly.

The Entry Age actuarial cost method is an "immediate gain" method (i.e., experience gains and losses are separately identified as part of the UAAL). However, they are amortized over the same period applied to all other components of the UAAL.

The actuarial valuation also determines the GASB Annual Required Contribution (ARC). This is the contribution required to pay the normal cost and amortize the UAAL over 30 years as a level percent of pay. The 30-year period applies to all components of the UAAL and is recalculated each year (open amortization method).

III. *Actuarial Value of Assets*

The actuarial value of assets is equal to the market value, adjusted for a five-year phase in of actual investment return in excess of expected investment return. The actual return is calculated net of investment and administrative expenses, and the expected investment return is equal to the assumed investment return rate multiplied by the prior year's market value of assets, adjusted for contributions, benefits paid, and refunds.

IV. *Actuarial Assumptions*

A. Economic Assumptions

1. Investment return: 8.00% per year, compounded annually, composed of an assumed 3.00% inflation rate and a 5.00% net real rate of return.

2. Salary increase rate: A 4.00% wage inflation component, including 3.00% price inflation, plus a service-related component as shown below:

Years of Service (1)	Service-Related Component (2)	Total Salary Increase Rate (3)
0	8.00%	12.00%
1-2	1.50%	5.50%
3-4	1.25%	5.25%
5-11	1.00%	5.00%
12-17	0.75%	4.75%
18-21	0.50%	4.50%
22-24	0.25%	4.25%
25 or more	0.00%	4.00%

3. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 3.50% per year. This increase rate has no allowance for future membership growth.

4. State revenue growth rate: In determining the funding period, the state's sales and income tax revenues are anticipated to grow at 3.50% per year. However, for years FY 2007 through FY 2010, revenue growth was decreased, reflecting the expected impact of new income tax rates.

5. Future ad hoc cost-of-living increases: None.

B. <u>Demographic Assumptions</u>

1. Mortality rates - after retirement or termination.

   a. Healthy males – RP-2000 Combined Mortality Table for males, projected to the year 2016 using Scale AA, multiplied by 90%, no set back.

   b. Healthy females - RP-2000 Combined Mortality Table for females, projected to the year 2016 using Scale AA, multiplied by 80%, no set back.

   c. Disabled males - RP-2000 Mortality Table for disabled males, multiplied by 75%, no set back.

   d. Disabled females - RP-2000 Mortality Table for disabled females, multiplied by 100%, no set back.

   Sample rates are shown below:

	Expected Deaths per 100 Lives			
Age	Healthy Males	Healthy Females	Disabled Males	Disabled Females
(1)	(2)	(3)	(4)	(4)
40	0.09	0.04	1.69	0.75
45	0.11	0.07	1.69	0.75
50	0.14	0.10	2.17	1.15
55	0.24	0.19	2.66	1.65
60	0.47	0.37	3.15	2.18
65	0.91	0.72	3.76	2.80
70	1.57	1.24	4.69	3.76
75	2.72	1.98	6.16	5.22
80	4.93	3.28	8.20	7.23

Mortality Improvement: To account for future mortality improvement, the tables and table multipliers selected above were chosen so that the assumed mortality rates are smaller than the rates observed in the last experience study, covering experience for FY 2005 – FY 2009. The ratio of the actual number of deaths occurring during this period to the expected number based on the selected assumptions was:

- 115% for nondisabled male annuitants
- 120% for nondisabled female annuitants
- 112% for disabled male annuitants
- 130% for disabled female annuitants

2. Mortality rates - active members – RP-2000 Employee Mortality tables, with male rates multiplied by 60% and female rates multiplied by 50%. Sample rates are shown below:

	Expected Deaths per 100 Lives	
Age	Male Members	Female Members
(1)	(2)	(3)
25	0.02	0.01
30	0.03	0.01
35	0.05	0.02
40	0.06	0.04
45	0.09	0.06
50	0.13	0.08
55	0.18	0.13
60	0.29	0.20
65	0.45	0.29

No future improvement was assumed for pre-retirement mortality, since this would not have a material effect on the liabilities or costs.

3. Disability rates - Based on 2010 Experience Study, males and females separate. Sample rates are shown below:

	Expected Disabilities Occurring per 100 Lives	
Age	Male Members	Female Members
(1)	(2)	(3)
25	0.025	0.023
30	0.025	0.023
35	0.035	0.045
40	0.065	0.112
45	0.100	0.180
50	0.300	0.270
55	0.450	0.378
60	0.175	0.378
65	0.000	0.000

Disability rates are applied only for members with 10 or more years of service, since rates were developed based on exposure for this group.

4. Termination Rates - Separate male and female rates, based solely on the member's service, developed from the 2010 Experience Study. Rates reflect terminations for causes other than death, disability or retirement. Sample rates are shown below:

Expected Terminations per 100 Lives

Credited Service (Years)	Males	Females
(1)	(2)	(3)
0	30.00	24.00
1	14.00	12.00
2	12.50	10.50
3	11.00	9.00
4	9.50	8.25
5	8.50	7.50
6	7.50	6.75
7	6.75	6.00
8	6.00	5.25
9	5.25	4.50
10	4.75	4.00
11	4.50	3.50
12	4.00	3.25
13	3.75	3.00
14	3.50	2.75
15	3.25	2.50
16	3.00	2.25
17	2.75	2.00
18	2.50	1.75
19	2.25	1.50
20	2.00	1.40
21	1.75	1.30
22	1.50	1.20
23	1.25	1.10
24	1.00	1.00
25 or more	0.00	0.00

Termination rates are not applied to a member who is eligible for a retirement benefit (reduced or unreduced).

5. Retirement rates - Separate male and female rates, based on age, developed from the 2010 Experience Study. Sample rates are shown below:

Expected Retirements per 100 Lives

	Unreduced Retirement				Reduced Retirement	
	Males		Females			
Age	Rule of 80	Rule of 90	Rule of 80	Rule of 90	Males	Females
Under 50	0.0	0.0	0.0	0.0	0.0	0.0
50	12.0	19.5	12.5	20.0	0.0	0.0
51	12.0	19.5	12.5	20.0	0.0	0.0
52	12.0	19.5	12.5	20.0	0.0	0.0
53	12.0	19.5	12.5	20.0	0.0	0.0
54	12.0	19.5	12.5	20.0	0.0	0.0
55	12.0	19.5	12.5	20.0	1.0	1.5
56	12.0	19.5	12.5	20.0	1.8	2.0
57	12.0	22.0	12.5	22.5	2.0	2.3
58	12.0	22.0	12.5	22.5	2.3	2.5
59	12.0	22.0	12.5	22.5	2.5	2.8
60	12.0	22.0	15.0	25.0	2.8	3.0
61	12.0	22.0	18.0	28.0	3.0	3.5
62	20.0	30.0	25.0	35.0		
63	18.0	18.0	18.0	18.0		
64	16.0	16.0	16.0	16.0		
65	20.0	20.0	25.0	25.0		
66	20.0	20.0	22.5	22.5		
67	20.0	20.0	22.5	22.5		
68	20.0	20.0	22.5	22.5		
69	20.0	20.0	22.5	22.5		
70	20.0	20.0	22.5	22.5		
71	20.0	20.0	22.5	22.5		
72	20.0	20.0	22.5	22.5		
73	20.0	20.0	22.5	22.5		
74	20.0	20.0	22.5	22.5		
75 and over	100.0	100.0	100.0	100.0		

C. <u>Other Assumptions</u>

1. Percent married: 80% of employees are assumed to be married.

2. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

3. Percent electing annuity on death (when eligible): All of the spouses of married participants who die after becoming eligible for a retirement benefit are assumed to elect an annuity, in lieu of the $18,000 lump sum and refund.

4. Percent electing deferred termination benefit: vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.

5. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at age 62.

6. Administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.

7. Supplemental medical insurance: All members, whether currently active, inactive, or retired, are assumed to be eligible to receive the supplemental insurance benefit, if they have at least 10 years of service credit at retirement.

8. Members who retire with at least 24 years of credited service are assumed to have 120 days of unused sick leave for which they will receive one year of service credit. This assumption only applies to reduced and unreduced retirement.

9. No assumption was made that current active members employed by the comprehensive universities will elect to transfer out of OTRS.

10. Reemployment, purchase of service, transfers: No recognition is made of (i) future member reimbursements upon reemployment, (ii) future purchase of additional service, or (iii) special transfer provisions.

11. For EESIP eligible employees, if the refund amount to be paid exceeds the actuarial present value of the additional benefit, then we assume the member does not elect the enhanced benefit.

V. *<u>Participant Data</u>*

Participant data was supplied on an electronic file for (i) active members, (ii) inactive vested members who are entitled to a future deferred benefit, (iii) inactive nonvested members who are entitled to a refund of their employee contributions, and in some cases a portion of the accumulated interest, and (iv) members and beneficiaries receiving benefits.

The data for active and inactive, non-retired members included birthdate, sex, years of service, a classified/non-classified status code, salary, employee contributions and accumulated interest on employee contributions. The data also included a code to indicate whether the employee had elected to make contributions on salary above $25,000, and a code indicating the type of employer (comprehensive university, other college or university, or other employer). For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Salary supplied for the current year was based on the earnings for the October preceding the valuation date. This salary was adjusted by the salary increase rate for one year.

Assumptions were made to correct for missing, bad, or inconsistent data. These had no material impact on the results presented.

Some inactive, nonvested employees who are entitled to a refund are not included in the data, but a liability for their refund is included instead in the Suspense Fund, which is included in the liability.

VI. *Dates of Adoption of Assumptions and Methods*

Generally, the actuarial assumptions and methods were developed from the 2010 experience study, and were adopted by the Board of Trustees in September 2010 and first reflected in this actuarial valuation. The adopted assumptions were recommended by the actuary. Some assumptions were left unchanged from the prior experience study in 2005, including the investment return rate, the inflation and payroll growth rates, and the male disability rates.

Since the June 30, 2004 valuation, there has been an assumption that future ad hoc cost-of-living increases would be granted from time to time, without additional funding. The initial assumption was that these would average 1.00% per year. Effective July 1, 2008, the assumption was modified from 1.00% to 2.00% per year. Because of the enactment of HB 2132 in 2011, this assumption was eliminated effective with the June 30, 2011 actuarial valuation.

GLOSSARY

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB 25, such as the funded ratio and the ARC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Annual Required Contribution (ARC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB 25. The ARC consists of the Employer Normal Cost and the Amortization Payment

Closed Amortization Period: A specific number of years that is counted down by one each year and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA, although GASB 25 reporting requires the use of the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used it two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 25 and ***GASB 27***: Governmental Accounting Standards Board Statements No. 25 and No. 27. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.