## Oklahoma Teachers

 Retirement System

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

FISCAL YEAR ENDED JUNE 30, 2012

## Mission Statement

We collect, protect and grow assets to provide a secure retirement income for public education employees.

## Vision

Educate and inform clients who are confident in OTRS' ability to provide their benefits

Clients have access to on-demand, accurate personal financial information
Be a World Class Revitalization Role Model

## Core Values

We value the following in delivering our service:
Accuracy
Consistency/Reliability
Timely/Responsive
Security/Confidentiality
Professionalism

## Oklahoma Teachers

# Oklahoma Teachers Retirement System 

A Component Unit of the State of Oklahoma

## Comprehensive Annual

## Financial Report

## June 30, 2012

Oklahoma Teachers Retirement System
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Oklahoma Teachers
Retirement System


The Board of Trustees
Oklahoma Teachers Retirement System
2500 N. Lincoln Boulevard
Oklahoma City, OK 73105
Dear Board of Trustees:
We are honored to present the 2012 Comprehensive Annual Financial Report (CAFR) of the Oklahoma Teachers Retirement System (the System) for the fiscal year ended June 30, 2012. The information included in this report not only defines our purpose, but represents our commitment to protecting the financial future of our active and retired clients. We accomplish this by monitoring and evaluating our daily operations as well as prudently managing the $\$ 10.4$ billion of net assets in the fund. The Teachers' Retirement System of Oklahoma is a component unit of the state of Oklahoma.

## Profile of System

Established by legislation, the System began operation on July 1, 1943. The System provides retirement allowances and other benefits to public education employees in the common schools, career technology centers, colleges and universities, and other local and state educational agencies of the state of Oklahoma.

The mission of the System is to provide outstanding customer service to all of our active and retired Clients. All services provided by the staff are performed to meet that objective.

## Management Responsibility

Management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance that the transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with generally accepted accounting principles. This system includes written policies and procedures. Responsibility for the preparation, accuracy, completeness and fairness of this presentation, including all disclosures, rests firmly with the System's management. To the best of our knowledge and belief, this financial report is complete and reliable in all material aspects.

The System maintains a comprehensive internal control framework designed to assure that assets are safeguarded from theft or misuse, transactions are completed accurately, and financial statements are fair and reliable. Internal control is designed to provide reasonable assurance, but not absolute assurance, that these objectives are met. The concept of reasonable assurance
recognizes first, that the cost of a control should not exceed the benefits likely to be derived, and second, the valuation of cost and benefits requires estimates and judgements by management. The System has its own internal audit program with an Internal Auditor who reports directly to the Executive Secretary and regularly provides written and oral reports to the Board of Trustees.

The System operates according to an administrative budget approved annually by the Board. Although revenue is not appropriated from the state's General Revenue Fund, the budget is submitted to the Legislature as part of the Governor's recommended budget. The System operates under the same budgetary controls that apply to all state agencies.

The basic financial statements are prepared in accordance with generally accepted accounting principles as promulgated by the Government Accounting Standards Board. An independent auditing firm, Cole and Reed PC, has audited the financial statements included in this report and their opinion letter is presented in the Financial Section of this CAFR. Readers are encouraged to review the Management's Discussion and Analysis (MD\&A) in the Financial Section for an in-depth discussion of the financial statements and the cause and effect of market conditions, legislation and changes in operations affecting the System's financial results.

## Economic Condition and Outlook

For the year ended June 30, 2012, the System's investment portfolio realized a $1.8 \%$ rate of return. The total investment returns for the one, five, and ten year periods are below the actuarial assumed rate of investment return of $8.0 \%$, while the returns for the 3 year period exceeded the actuarial assumed rate of investment return. More importantly, the total investment returns from November 1991 to current were $9.0 \%$ annualized, well in excess of the $8.0 \%$ actuarial assumed rate of return.

A properly funded pension plan continues to be the Board's most significant challenge. As of June 30, 2012, only $54.8 \%$ of the System's actuarial liabilities were covered by the actuarial value of assets. This is a decrease from the $56.7 \%$ funded ratio reported for June 2011. These decreases were primarily due to a gain on assets with returns of only $1.3 \%$ on a market value basis and $3.3 \%$ on the actuarial value of assets compared to the assumed rate of $8.0 \%$. Based upon the current statutory contribution schedule, the funding period is 22 years. This is the same as in the previous actuarial valuation despite the experienced losses.

Several bills were passed in the Fiscal Year 2011 State of Oklahoma legislative session which had a significant impact on the 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 whern they are granted, no assumption for future COLAs is currently included in the liabilities of the System. This change decreased the unfunded actuarial accrued liability (UAAL) by $\$ 2.814$ 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.

## Revenue and Funding

The major sources of revenue for the System are member contributions, employer contributions, dedicated revenue from the state of Oklahoma, and investment income.

Active member contributions for fiscal year 2012 were $\$ 291.4$ million, which represents $7 \%$ of covered payroll. This compares to $\$ 286.6$ million for the fiscal year ending June 30, 2011. Member contributions include direct payments by members to reestablish service credit, purchase Oklahoma, out-of-state or military service, and payments required to qualify for the Education Employees Service Incentive Plan (EESIP).

Contributions from local employers, the state of Oklahoma, and federal sources for fiscal year 2012 totaled $\$ 681.6$ million, compared to $\$ 638.5$ million for fiscal year 2011. Contributions from local school districts and federal revenues increased by $\$ 12.7$ million, and the state's contribution increased by $\$ 30.5$ million.

## Expenses

The System's expenses are attributable to retirement benefit payments including health insurance subsidies, death and survivor benefits, refunds of member contributions and administrative expenses. During fiscal year 2012, the System paid $\$ 56.9$ million more in retirement, survivor and insurance benefits than in the preceding year, $\$ 3.1$ million less in refunds to active clients who terminated accounts, and $\$ 1.0$ million less in distributions from the Systems 403(b) Tax Sheltered Annuity Plan. The increase in retirement and insurance benefits is attributed to a net increase in the number of retired members and the average benefit payments. The decrease in refunds and death benefits is due to a decrease in the number of members making withdrawals from the defined benefit plan. Administrative expenses decreased by $\$ 443$ thousand due primarily to a decrease in personnel costs.

## Investments

For FY 2012, the System experienced a $1.8 \%$ positive rate of return. Net investment income, including realized and unrealized gains and losses, was a positive $\$ 143.7$ million compared to a positive $\$ 1,926$ billion for FY 2011. Net assets totaled $\$ 10.4$ billion at market value on June 30, 2012 compared to $\$ 10.4$ billion on June 30, 2011. These numbers include the amounts held in trust for members who participate in the Systems 403(b) Tax Sheltered Annuity Plan.

On June 30, 2012, the System's investment portfolio mix at market value was $29 \%$ fixed income, $58 \%$ equities, $5.0 \%$ master limited partnerships, $3.0 \%$ alternative investments, and $5.0 \%$ real estate. As fiduciaries for the retirement funds, the Board of Trustees is responsible for investment of the funds under the prudent person standard. This standard allows the System to allocate trust funds across a broad group of asset classes. The Board of Trustees has elected to limit investments to stocks and bonds, Treasury Bills and Notes, Commercial Paper, foreign currency exchange contracts, private equity, master limited partnerships and bank deposits collateralized by U.S. Government securities.

A summary of the System's investment activities during fiscal year 2012 and historic performance results is presented in the Investment Section.

## Awards and Acknowledgements

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of Oklahoma for its comprehensive annual financial report for the fiscal year ended June 30, 2011. This is the nineteenth consecutive year the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the System must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

This report reflects the combined efforts of the System's staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, determining compliance with legal provisions, and as a means for determining responsible stewardship for the assets contributed by the members and their employers.

This report is being mailed to the Governor, members of the Oklahoma Legislature, and the Oklahoma State Pension Commission. This report will also be available on our website at www.ok.gov/TRS.

I would like to take this opportunity to express my gratitude to you, the staff, the advisors, and other people who have worked so diligently to assure the continued successful operation of the Teachers' Retirement System of Oklahoma.

Respectfully submitted,


James. R. Wilbanks, Ph.D.
Executive Director
December 20, 2012

# TEACHERS RETIREMENT SYSTEM OF OKLAHOMA 

Street Address:<br>2500 North Lincoln Boulevard, $5^{\text {th }}$ Floor<br>Oklahoma City, Oklahoma 73105<br>Mailing Address:<br>Post Office Box 53524<br>Oklahoma City, Oklahoma 73152-3524<br>(405) 521-2387

BOARD OF TRUSTEES

Dr. Michael Simpson, Chairman, Ponca City<br>Dr. Gary Trennepohl, Vice Chairman, Tulsa<br>Mr. Bruce DeMuth, Secretary, Stillwater<br>Ms. Sherrie L. Barnes, Trustee, Sand Springs<br>Mr. James Dickson, Trustee, Oklahoma City<br>Mr. Vernon Florence, Trustee, Stillwater<br>Mr. Roger Gaddis, Trustee, Ada<br>Ms. Jill Geiger, Trustee, Ex-Officio<br>Ms. Beth Kerr, Trustee, Edmond<br>Mr. Bill Peacher, Trustee, Tulsa<br>Mr. Stewart Meyers, Jr., Trustee, Oklahoma City<br>Mr. Jonathan Small, Trustee, Ex-Officio<br>Ms. Billie Stephenson, Trustee, Marlow

## INVESTMENT COMMITTEE

Mr. James Dickson
Mr. Vernon Florence Mr. Bill Peacher
Dr. Michael Simpson
Dr. Gary Trennepohl, Chairman

## AUDIT COMMITTEE

Ms. Sherrie Barnes
Mr. Jonathan Small
Mr. Bruce DeMuth, Chairman
Mr. Joe Ezzell, Non-Voting Member

## Oklahoma Teachers Retirement System



## Oklahoma Teachers

## Retirement System

Plan Summary 2011-2012

## BEGINNINGS

The Oklahoma Teachers Retirement System (the System) was established July 1, 1943, to provide retirement allowances and other specified benefits for qualified employees of state-supported educational institutions.

## ADMINISTRATION

A 13-member Board of Trustees oversees the administration of the System and acts as fiduciary for investing its funds.

## CONTRIBUTION

S
As a member of the System, your contribution rate is 7\% of your total compensation (salary and your fringe benefits).

Statutes also require employers to contribute a percentage of applicable employee earnings. The employer contribution rate for K-12 school districts, career-techs, and junior colleges is $9.5 \%$. The employer contribution rate for comprehensive universities (University of Oklahoma and Oklahoma State University and their entities) and the state's four-year regional universities is $8.55 \%$.

## MEMBERSHIP

Oklahoma statutes require classified personnel to be members the System. The definition of classified personnel in 70 O.S., § 17-101 includes teachers and other certified employees of common schools, faculty and administrators in public colleges and universities, and administrative personnel of state educational boards and agencies who are employed at least half-time. Membership is optional for all other regular employees of public educational institutions who work at least 20 hours per week.

Employers of a charter school may join the System if the Oklahoma Teachers Retirement System Board of Trustees approves the school's application for membership.

New employees at the University of Oklahoma, OU Health Sciences Center, and Oklahoma State University have the option to participate in an alternate retirement plan provided by the universities. Employees choosing the alternate retirement plan are not eligible to participate in the System as long as they remain employees of the universities.

## SERVICE CREDIT

You must work at least six full school months to qualify for one year of membership. A school month is 20 school days of at least six hours. You will receive partial credit for employment of fewer than six months or between four and six hours per school day. You also may purchase credit for out-of-state service, military service, service with certain Oklahoma governmental entities, and employment in Oklahoma schools before your date of membership.

Retiring members may count up to 120 days of unused accumulated sick leave toward an additional year of service credit.

## RETIREMENT ANNUITY

You are fully vested after five years of contributory Oklahoma membership service. A vested member can receive benefits after satisfying eligibility requirements.

Members joining the System before July 1, 1992, may retire with unreduced benefits when age and years of creditable service total 80 (Rule of 80). Members joining the System after June 30, 1992 and before November 1, 2011, may retire with unreduced benefits when age and years of creditable service total 90 (Rule of
90). Members joining the System after November 1, 2011 may retire with unreduced benefits when age and years of creditable service total 90, but no earlier than age 60 (Rule of 90/Minimum age 60).
You may retire at age 62 with unreduced benefits after completing five years of Oklahoma service.
You may retire with reduced benefits as early as age 55, if you have at least five years of creditable Oklahoma service.

The Oklahoma Teachers Retirement System is a governmental defined benefit plan under Section 401(a) of the Internal Revenue Code. The retirement benefits paid to our members are not determined by the market value of their retirement account, but rather by a formula. The formula includes years of service and highest average salary multiplied by a $2 \%$ computation factor.
The final average salary is not limited to the highest average salary defined under the Rule of 80 (highest three salaries) or Rule of 90 (highest five consecutive salaries), but may include any years previously capped.
The Education Employees Service Incentive Plan (EESIP) provides the opportunity for capped years to be diminished by two years for every one year worked beyond the full retirement eligibility date. If salaries earned prior to July 1, 1995 are greater than $\$ 40,000$, there will be a cost to participate in EESIP. Clients retiring from a four year university, college or other related entity are not eligible to participate in this plan.
If you work for a comprehensive university (OU/OSU) or other associated entity, your retirement benefit calculation may involve a multi-step process. First, we will determine your capped average salary prior to July 1, 1995. Next we will determine your capped average salary between July 1, 1995 and June 30, 2007. Finally, years of service that did not meet the caps as well as service credit earned after July 1, 2007, will be incorporated into the retirement benefit formula using the highest average of actual total compensation, not to exceed the IRS compensation limits. There may be as few as one average salary or as many as four weighted averages to determine the final average salary used in the final benefit calculation.
Each of the Systems's five retirement plans provides a lifetime benefit to the member. After the member's death, the designated beneficiary(ies) receive either a lump-sum payment or continued payments to one beneficiary, depending upon the elected plan's provisions.

## DISABILITYBENEFITS

You may qualify for disability retirement benefits if a medical condition keeps you from performing your regular duties as a public school employee. You may be considered for an Oklahoma Teachers Retirement System disability retirement benefit if you have at least 10 years of contributory service, you submit a disability retirement application detailing your medical condition (which must have existed while you were employed by the public schools of Oklahoma), and your application is approved by the System's Medical Review Board and the Board of Trustees.
If you are awarded Social Security Disability benefits, you qualify for disability benefits with the System if you incur the disability while employed by the public schools and provide the System with proof of the Social Security award.
(Continued on Reverse Side)

## HEALTH INSURANCE BENEFIT

If you have at least 10 years of creditable service and retire or terminate your employment, you may elect to continue coverage in the insurance program your employer provides to active employees.

If you are not enrolled in the state plan, coverage is subject to the provisions of the plan in which you are enrolled.

Dependent and dental coverage is available if you are enrolled in the State and Education Employees Group Health and Dental Insurance Plan.

Once you begin receiving monthly retirement checks, Oklahoma Teachers Retirement System will pay for the first $\$ 100$ to $\$ 105$ of monthly premiums for you, but not for your dependents. The actual amount paid by the System is determined by your total service and average salary at retirement.

If you have fewer than 10 years of employment, you have certain rights under federal law to continue health insurance coverage after your employment ends. You should request information about continued coverage from your school's payroll office or the State and Education Group Insurance Board before termination.

## SURVIVOR BENEFITS

Your designated beneficiary or estate is entitled to survivor benefits if you are a member of the System when you die.
If you are an active in-service member when you die, your beneficiary(ies) will receive an $\$ 18,000$ death benefit, plus the contributions in your account and interest on those contributions. "Active in-service" is defined in the Oklahoma Teachers Retirement System rules, but generally means a member currently employed by an Oklahoma public education institution. When you die, if you are an active in-service member with 10 or more years of service, have reached age 55 or met the Rule of 80 or Rule of 90 and you have one designated primary beneficiary, he or she may choose a monthly benefit instead of the lump-sum payment.

If you are an inactive member when you die, your beneficiaries will receive the amount of the contributions in your account, plus interest on those contributions, but will not qualify for the $\$ 18,000$ death benefit or the monthly retirement benefit payment payable to the surviving beneficiary of active in-service members.

If you die after you retire, your beneficiary or estate will receive a $\$ 5,000$ death benefit, plus the survivor benefits provided by your chosen retirement plan. Certain retirement plan options provide your surviving beneficiary(ies) with a continuing monthly retirement benefit.

## WITHDRAWING YOUR CONTRIBUTIONS

If you leave the job that qualified you for membership, you may request a refund of your contributions any time after your last day on that job. You will be eligible to receive the refund four months after you leave your job. The refund includes all contributions made by you or on your behalf by your employer, plus any applicable portion of interest earnings. When you accept a refund, you forfeit all service credit.

If you return to qualifying employment, you may redeposit your withdrawn account after you contribute to the System for 12 months.
Redepositing your withdrawn contributions reinstates your initial membership date. If you do not redeposit your withdrawn contributions, your official membership date will be the date you rejoined the System.

If you decide to redeposit, you must redeposit the entire amount you withdrew and pay $10 \%$ simple interest on that amount for each year your account was withdrawn. You may pay this amount in one lump sum or through installment payments for up to 60 months.
Only an optional member (support personnel) can terminate membership in the System without terminating employment. If you are an optional member and withdraw your account without leaving your job, the IRS requires that pre-tax contributions remain on deposit and cannot be refunded until you leave your job.

If you continue working for your employer after terminating your membership, you can rejoin the System only under special
provisions of an Internal Revenue Service private letter ruling requiring a period of non-membership and loss of the right to redeposit withdrawn service or purchase prior service credits. In this case, you would become a new member as of the date you rejoin.

You also may leave your contributions in your account. If you are vested (have at least five years if Oklahoma service), your account will continue earning interest until you withdraw it or begin drawing your retirement benefit. If you are not vested, your account will continue earning interest for five years, unless you withdraw it before then.

## THE 403(b) TAX SHELTERED ANNUITY PLAN

The System sponsors a tax sheltered annuity program qualified under § 403(b) of the Internal Revenue Code. You may deposit funds into this plan if your local Board of Education or other governing board adopts a resolution making the plan available to its employees.
The tax sheltered annuity program has been managed internally since its inception in 1964. In July 2009, the Board of Trustees hired ING Life Insurance and Annuity Company to be the service provider for the 403(b) Plan.

Under the new plan, participants may access their accounts 24 hours a day by calling a toll-free number or via the internet. Customer service representatives are available each weekday from 7:00 am to 8:00 pm. The investments are flexible and diversified and there are fifteen options to choose from.

The most exciting feature of the new plan is the comprehensive educational strategy developed by ING. A dedicated representative from ING will be available to meet with you at least annually to discuss your retirement goals and needs.

## RIGHTS AND RESPONSIBILITIES

Oklahoma Teachers Retirement System publications provide answers to general questions. You are responsible for resolving any questions about your retirement account. You are entitled to counseling from the staff concerning any questions you have about your retirement account. The System will not be held accountable for information that is contrary to statutes or administrative rules, regardless of who provides that information.

For details of how statutes and administrative rules may affect your retirement account, contact

OKLAHOMA TEACHERS RETIREMENT SYSTEM Mailing Address<br>PO Box 53524<br>Oklahoma City, OK 73152-3524<br>Street Address<br>Oliver Hodge Building<br>2500 N. Lincoln Blvd. $-5^{\text {th }}$ Floor<br>Oklahoma City, OK 73105<br>\section*{Phone Numbers}<br>405-521-2387 (OKC Area)<br>877-738-6365 (Toll Free)

Website:
http://www.ok.gov/TRS
This Plan Summary provides general information summarizing the basic benefits available to members of the System. If conflict arises between information contained in this summary and state statutes or official Oklahoma Teachers Retirement System rules, the law and/or rule takes precedence.

Revised 01/2012

# Certificate of <br> Achievement for Excellence in Financial Reporting 

Presented to

# Oklahoma Teachers Retirement System 

For its Comprehensive Annual<br>Financial Report<br>for the Fiscal Year Ended

June 30, 2011
A Certificate of Achievennent for Excellence in Financial
Reporting is presented by the Government Finance Officers
Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.


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Oklahoma Teachers
Retirement System

COLE+REED

# Independent Auditors' Report 

Board of Trustees<br>Teachers' Retirement System<br>of Oklahoma

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of Oklahoma (the "System"), a part of the financial reporting entity of the state of Oklahoma, as of June 30, 2012 and 2011, and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in the Government Auditing Standards, issued by the Comptroller General of the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note M, the System's actuary has determined that the System's unfunded actuarial accrued liability (the "UAAL") is approximately $\$ 8,398,000,000$. The funding of the actuarial accrued liabilities is predicated on a funding schedule mandated by Oklahoma Statutes. Under the present funding schedule, the UAAL will be fully amortized in 22 years.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets of the System at June 30, 2012 and 2011, and the changes in its net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued a report dated December 11, 2012, on our consideration of the System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audits.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, beginning on page 13, and the schedules of funding progress and employers' contributions on page 40, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The information included in pages 41 through 43 is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.


Oklahoma City, Oklahoma
December 11, 2012

## Management's Discussion and Analysis

Management is pleased to present this discussion and analysis of the financial activities of the Oklahoma Teachers Retirement System ("OTRS" or the "System") for the years ended June 30, 2012 and 2011. The System is responsible for administering retirement benefits for a 401(a) defined benefit plan for all educational employees of the state of Oklahoma as well as a voluntary defined contribution plan, 403(b). The System was established on July 1, 1943 for the purpose of providing these retirement benefits and other specific benefits for qualified persons employed by public educational institutions. The main purpose of the System is to provide a primary source of lifetime retirement benefits relative to years of service at the time of retirement. It is the objective of the System to provide these benefits in a prudent, responsible, and costeffective manner. Plan net assets are used to pay current and future benefits to retired clients.

This discussion and analysis is intended to serve as an introduction to the System's basic financial statements. OTRS's basic financial statements are comprised of three components: 1) statement of plan net assets, 2) statement of changes in plan net assets, and 3) notes to the financial statements. This report also contains required supplementary information in addition to the basic financial statements themselves.

The statement of plan net assets presents information on all of the System's assets and liabilities, with the difference between the two reported as net assets held in trust for pension benefits and annuity benefits of electing members. Over time, increases or decreases in net plan assets may serve as a useful indicator of whether the financial position of the System is improving or deteriorating. Information relating to the System's ability to meet the cost of future benefit payments, is not shown on the statement of plan net assets, but is located in both the notes to the financial statements and the required supplementary information.

The statement of changes in plan net assets presents information showing how the System's net assets changed during the most recent fiscal year. Changes in net assets are recognized using the accrual basis of accounting, in which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned and become measurable.

The notes to the financial statements are critical to the reader's understanding of the financial status of the System. These notes include a description of the System, details on the cash and investments of the System, as well as contribution and benefit information.

The required supplementary information presents a Schedule of Funding Progress that provides historical trend information about the actuarially determined funded status of the System. The Schedule of Employers' Contributions provides historical trend information about the annual required contributions ("ARC") of the System and the contributions made to the System in relation to the ARC. Other supplementary information includes the Schedules of Administrative Expenses, the Schedules of Investment Expenses, and the Schedules of Professionals/Consultants Fees. These schedules provide additional analysis of the information provided in the financial statements.

## CONDENSEDFINANCIAL INFORMATION

Plan Net Assets as of June 30:


Changes in Plan Net Assets for the year ended June 30:

## ADDITIONS <br> Member contributions Employer contributions Matching contributions Dedicated tax revenue Member tax shelter contributions Net investment income gain Security lending net income

TOTALADDITIONS
DEDUCTIONS:
Benefit payments
Refund of member contributions and tax sheltered annuity
Administrativeexpenses
TOTALDEDUCTIONS
NETINCREASE

NET ASSETS, BEGINNING OF YEAR
NET ASSETS, END OF YEAR

| 2012 | 2011 | 2010 |
| :---: | :---: | :---: |
| \$ 291,385,506 | \$ 286,643,244 | \$ 290,247,028 |
| 376,635,234 | 364,025,589 | 366,282,238 |
| 23,188,952 | 23,128,795 | 26,448,892 |
| 281,806,711 | 251,322,410 | 227,926,247 |
| 3,448,031 | 5,010,856 | 5,402,646 |
| 134,376,020 | 1,919,301,220 | 1,186,235,015 |
| 9,279,228 | 6,336,019 | 5,032,411 |
| 1,120,119,682 | 2,855,768,133 | 2,107,574,477 |
| 1,036,132,586 | 979,245,846 | 912,912,714 |
| 54,737,731 | 58,920,565 | 74,951,443 |
| 4,273,189 | 4,716,480 | 4,979,589 |
| 1,095,143,506 | 1,042,882,891 | 992,843,746 |
| 24,976,176 | 1,812,885,242 | 1,114,730,731 |
| 10,379,808,684 | 8,566,923,442 | 7,452,192,711 |
| \$ 10,404,784,860 | \$ 10,379,808,684 | \$ 8,566,923,442 |


| $\begin{gathered} 2012 \\ \text { \% Change } \end{gathered}$ | $\begin{gathered} 2011 \\ \text { \% Change } \end{gathered}$ |
| :---: | :---: |
| 1.65\% | -1.24\% |
| 3.46\% | -0.62\% |
| 0.26\% | -12.55\% |
| 12.13\% | 10.26\% |
| -31.19\% | -7.25\% |
| -93.00\% | 61.80\% |
| 46.45\% | 25.90\% |
| -60.78\% | 35.50\% |
| 5.81\% | 7.27\% |
| -7.10\% | -21.39\% |
| -9.40\% | -5.28\% |
| 5.01\% | 5.04\% |
| -98.62\% | 62.63\% |
| 21.16\% | 14.96\% |
| 0.24\% | 21.16\% |

## FINANCIAL HIGHLIGHTS AND ANALYSIS

Total fund returns for fiscal year 2012 were essentially flat with an increase of $0.2 \%$ from fiscal 2011. Domestic and international equity, which compose $58.0 \%$ of the investment portfolio asset allocation, both decreased by $-0.70 \%$ and $-12.2 \%$, respectively. Investments in fixed income securities, which compose $29.0 \%$ of the investment portfolio, increased by $11.2 \%$. The increase in net assets for fiscal year 2011 was primarily due to investment gains as a result of significant market improvement. The total investment returns for FY 2011 were 23.5\%. Domestic and international equity, which composed $60.0 \%$ of the investment portfolio asset allocation, had the greatest increases at $34.0 \%$.


The total investment returns for the one, five, and ten year periods are below the actuarial assumed rate of investment return of $8.0 \%$, while the returns for the 3 year period exceeded the actuarial assumed rate of investment return. More importantly, the total investment returns from November 1991 to current were $9.0 \%$ annualized, well in excess of the $8.0 \%$ actuarial assumed rate of return.

| Total returns | 1 year | 3 year | 5 year | 10 year |
| :---: | :---: | :---: | :---: | :---: |
| 2012 | 1.8\% | 13.6\% | 2.7\% | 7.6\% |
| 2011 | 23.5\% | 6.5\% | 5.9\% | 6.9\% |
| 2010 | 16.6\% | -3.1\% | 3.4\% | 4.4\% |
| 2008 | -7.2\% | 6.5\% | 10.0\% | (1) |
| 2003 | 5.2\% | -0.8\% | 4.0\% | (1) |

(1) Historical returns were not available for this time period

Benefit payments increased $5.8 \%$ in 2012 compared to a $7.3 \%$ increase in 2011. The increase in 2012 is a result of a $3.7 \%$ increase in the number of benefit recipients and a $1.1 \%$ increase in the average monthly benefit. The increase in 2011 is a result of a $4.3 \%$ increase in the number of benefit recipients and a $1.7 \%$ increase in the average monthly benefit. Benefit payments in 2012 to retired members exceed contributions from contributing members and employers by $\$ 95$ million or a ratio of 1.10 to 1 . A ratio of less than one is desirable because it signifies that the System is receiving more contributions than it pays out in benefits. The table on the following page reflects the ongoing employer and member contributions.

# FINANCIAL HIGHLIGHTS AND ANALYSIS (Continued) 

|  | 2012 | 2011 | 2010 | 2008 | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Member contributions | \$ 291,385,506 | \$ 291,654,100 | \$ 295,649,674 | \$ 286,738,943 | \$ 220,503,413 |
| Employer contributions | 376,635,234 | 364,025,589 | 366,282,238 | 308,804,479 | 218,841,977 |
| Matching contributions | 23,188,952 | 23,128,795 | 26,448,892 | 21,274,957 | 14,267,487 |
| Dedicated tax revenue | 281,806,711 | 251,322,410 | 227,926,247 | 266,761,597 | 128,879,976 |
| Total contributions | 973,016,403 | 930,130,894 | 916,307,051 | 883,579,976 | 582,492,853 |
| Benefit payments Refund of contributions | $\begin{array}{r} 1,036,132,586 \\ 32,076,39 \\ \hline \end{array}$ | $\begin{array}{ll}  & 979,245,846 \\ 58,920,565 \\ \hline \end{array}$ | $\begin{array}{r} 912,912,714 \\ 5 \\ 5 \end{array}$ | $\begin{gathered} 806,540,725 \\ 3 \\ \hline 63,925,592 \\ \hline \end{gathered}$ | $\begin{array}{r} 608,976,125 \\ \underline{2} \quad 73,563,552 \\ \hline \end{array}$ |
| Total payments | \$ 1,068,208,984 | \$1,038,166,411 | \$ 987,864,157 | \$870,466,317 | \$ 682,539,677 |
| Ratio benefit payments/ contributions | 1.10 | 1.12 | 1.08 | 0.99 | 1.17 |

Since 2003, the number of benefit recipients increased by 14,657 or $38.5 \%$. The number of members retiring has remained relatively stable for the last five years.

|  | 2012 | 2011 | 2010 | 2008 | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit recipients | 52,716 | 50,829 | 48,756 | 45,238 | 38,059 |
| Yearly \% change | 3.7\% | 4.3\% | 4.2\% | 4.0\% | 4.2\% |
| Net increase | 1,887 | 2,073 | 1,960 | 1,732 | 1,544 |

The following table reflects the average monthly benefit for service retirements. Over the tenyear period from 2003, the average benefit increased by $\$ 251$, or $19.2 \%$. The retirement benefit payments increased $56.5 \%$ or $\$ 385.7$ million over this ten-year period. In FY 2012 and 2011, the average benefit increases are due to an increase in the average benefit received by the newer retirees.

| Average benefit | 2012 |  | 2011 |  | 2010 |  | 2008 |  | 2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | 1,555 | \$ | 1,537 | \$ | 1,511 | \$ | 1,437 | \$ | 1,304 |
| Yearly \% change |  | 1.1\% |  | 1.7\% |  | 1.9\% |  | 1.3\% |  | 4.7\% |

The ratio of active members to retired members of the System is 1.67 to 1 in 2012 compared to 2.34 to 1 in 2003. Over the past ten years, the number of members contributing into the System increased $5.6 \%$. During the same period, the number of retired members increased by $38.5 \%$.

|  | 2012 | 2011 | 2010 | 2008 | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Members contributing | 87,778 | 88,085 | 89,896 | 88,678 | 83,127 |
| Yearly \% change | -0.3\% | -2.0\% | 0.6\% | 0.6\% | -2.6\% |
| Benefit recipients | 52,716 | 50,829 | 48,756 | 45,238 | 38,059 |
| Yearly \% change | 3.7\% | 4.3\% | 4.2\% | 4.0\% | 4.2\% |
| Ratio contributing/retired | 1.67 | 1.73 | 1.84 | 1.96 | 2.18 |

The measure of the progress in accumulating sufficient assets to meet the long-term benefit obligations is the funded status or the funded ratio of the System. The funded ratio is the actuarial value of assets expressed as a percentage of the actuarial accrued liability. The funding policy is the method to provide benefits, specified in the System, through the amounts and timing of contributions from the employers and the contributing clients. The excess of the actuarial accrued liability over the actuarial value of assets is the unfunded actuarial accrued liability ("UAAL"). The actuarial value of assets differs from the year-end fair value of the System's plan net assets by smoothing the effects of market fluctuations. In the calculation of the actuarial value of assets, $20 \%$ of the difference between the actual and assumed investment returns is included in the actuarial value of assets. During extended periods of market declines, the market value of the System's plan net assets usually will be less than the actuarial value of assets.

The unfunded actuarial accrued liability (UAAL) as of June 30, 2011 was $\$ 7.6$ billion, and increased to $\$ 8.398$ billion in 2012. As a result, the System's funded ratio-actuarial value of assets divided by the actuarial accrued liability-decreased from $56.7 \%$ to $54.8 \%$ as of June 30, 2012. These decreases were primarily due to a loss on assets with returns of only $1.3 \%$ on a market value basis and $3.3 \%$ on the actuarial value of assets compared to the assumed rate of $8.0 \%$. Based upon the current statutory contribution schedule, the funding period is 22 years. This is the same as in the previous actuarial valuation despite the experienced losses.

## REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the System's finances for all those with an interest in the System. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Executive Director of the Teachers' Retirement System of Oklahoma, P.O. Box 53524, Oklahoma City, Oklahoma 73152 or (405) 521-2387.

As of June 30, 2012 (with Comparative Totals as of June 30, 2011)

|  | 401(a) Plan |  | 403(b) Plan |  | ComparativeTotals June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2012 |  | 2011 |
| ASSETS |  |  |  |  |  |  |  |  |
| Cash | \$ | 24,936,734 |  |  | \$ | - | \$ | 24,936,734 | \$ | 14,348,481 |
| Short-term investments |  | 275,456,138 |  | - |  | 275,456,138 |  | 361,798,249 |
| Accrued interest and dividends receivable |  | 43,659,356 |  | - |  | 43,659,356 |  | 45,636,139 |
| Member contributions receivable |  | 23,754,560 |  | - |  | 23,754,560 |  | 22,103,498 |
| Employer contributions receivable |  | 33,991,038 |  | - |  | 33,991,038 |  | 34,484,109 |
| Receivable from the State of Oklahoma |  | 29,333,333 |  | - |  | 29,333,333 |  | 27,322,221 |
| Due from brokers for securities sold |  | 146,131,751 |  | - |  | 146,131,751 |  | 140,794,978 |
| Securitylending institutional daily assets fund |  | 1,764,088,842 |  | - |  | 1,764,088,842 |  | 2,023,648,275 |
| Long-term investments: |  |  |  |  |  |  |  |  |
| Mutual funds |  | - |  | 210,049,295 |  | 210,049,295 |  | 223,451,514 |
| U.S. government securities |  | 1,086,437,639 |  | - |  | 1,086,437,639 |  | 1,128,778,574 |
| U.S. corporate bonds |  | 1,714,515,243 |  | - |  | 1,714,515,243 |  | 1,806,875,024 |
| International corporate bonds and government securities |  | 76,226,837 |  | - |  | 76,226,837 |  | 70,083,523 |
| Equity securities |  | 6,296,233,773 |  | - |  | 6,296,233,773 |  | 6,549,478,652 |
| Alternative investments |  | 283,762,403 |  | - |  | 283,762,403 |  | 171,396,984 |
| Real estate |  | 472,317,628 |  | - |  | 472,317,628 |  | 37,216,288 |
| Total long-term investments |  | 9,929,493,523 |  | 210,049,295 |  | 10,139,542,818 |  | 9,987,280,559 |
| Capital assets, net |  | 1,543,239 |  | - |  | 1,543,239 |  | 874,921 |
| TOTALASSETS | \$ | 12,272,388,514 | \$ | 210,049,295 | \$ | 12,482,437,809 | \$ | 12,658,291,430 |
| LIABILITIES |  |  |  |  |  |  |  |  |
| Benefits in process of payment | \$ | 3,906,006 | \$ | - | \$ | 3,906,006 | \$ | 80,477,110 |
| Due to brokers for securities purchased |  | 300,652,220 |  | - |  | 300,652,220 |  | 164,155,126 |
| Payable under security lending agreement |  | 1,764,088,842 |  | - |  | 1,764,088,842 |  | 2,023,648,275 |
| Otherliabilities |  | 9,005,881 |  | - |  | 9,005,881 |  | 10,202,235 |
| TOTAL LIABILITIES | \$ | 2,077,652,949 | \$ | - | \$ | 2,077,652,949 | \$ | 2,278,482,746 |
| NET ASSETS |  |  |  |  |  |  |  |  |
| Net assets held in trust for pension benefits and annuity benefits of electing members | \$ | 10,194,735,565 | \$ | 210,049,295 | \$ | 10,404,784,860 | \$ | 10,379,808,684 |

See accompanying notes to financial statements.

For the Year ended June 30, 2012
(with Comparative Totals for the year ended June 30, 2011)

|  | 401(a) Plan |  | 403(b) Plan |  | Comparative Totals Year Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2012 |  | 2011 |
| Additions: |  |  |  |  |  |  |  |  |
| Members | \$ | 291,385,506 |  |  | \$ | - | \$ | 291,385,506 | \$ | 286,643,244 |
| Members tax shelter |  | - |  | 3,448,031 |  | 3,448,031 |  | 5,010,856 |
| Employer statutory requirement from local school districts |  | 376,635,234 |  | - |  | 376,635,234 |  | 364,025,589 |
| Matching funds |  | 23,188,952 |  | - |  | 23,188,952 |  | 23,128,795 |
| Dedicated tax |  | 281,806,711 |  | - |  | 281,806,711 |  | 251,322,410 |
| Totalcontributions |  | 973,016,403 |  | 3,448,031 |  | 976,464,434 |  | 930,130,894 |
| Investmentincome: |  |  |  |  |  |  |  |  |
| Interest \& dividends |  | 308,064,104 |  | 11,501,601 |  | 319,565,705 |  | 286,510,332 |
| Net appreciation in fair value of investments |  | $(144,717,179)$ |  | $(5,690,518)$ |  | $(150,407,697)$ |  | 1,668,724,492 |
| Investment expenses |  | $(34,781,988)$ |  | - |  | $(34,781,988)$ |  | $(35,933,604)$ |
| Gain from investing activities |  | 128,564,937 |  | 5,811,083 |  | 134,376,020 |  | 1,919,301,220 |
| Income from securities lending activities: |  |  |  |  |  |  |  |  |
| Securities lending income |  | 10,916,738 |  | - |  | 10,916,738 |  | 7,454,140 |
| Securities lending expenses: |  |  |  |  |  |  |  |  |
| Managementfees |  | $(1,637,510)$ |  | - |  | $(1,637,510)$ |  | $(1,118,121)$ |
| Net income from securities lending activities |  | 9,279,228 |  | - |  | 9,279,228 |  | 6,336,019 |
| Net investment gain |  | 137,844,165 |  | 5,811,083 |  | 143,655,248 |  | 1,925,637,239 |
| Total additions |  | 1,110,860,568 |  | 9,259,114 |  | 1,120,119,682 |  | 2,855,768,133 |
| Deductions: |  |  |  |  |  |  |  |  |
| Retirement, death, survivor, and health benefits |  | 1,036,132,586 |  | - |  | 1,036,132,586 |  | 979,245,846 |
| Refund of member contributions and annuity payments |  | 32,076,398 |  | 22,661,333 |  | 54,737,731 |  | 58,920,565 |
| Administrative expenses |  | 4,273,189 |  | - |  | 4,273,189 |  | 4,716,480 |
| Totaldeductions |  | 1,072,482,173 |  | 22,661,333 |  | 1,095,143,506 |  | 1,042,882,891 |
| NETINCREASE |  | 38,378,395 |  | $(13,402,219)$ |  | 24,976,176 |  | 1,812,885,242 |
| NET ASSETS, BEGINNING OF YEAR |  | 10,156,357,170 |  | 223,451,514 |  | 10,379,808,684 |  | 8,566,923,442 |
| NET ASSETS, END OF YEAR | \$ | 10,194,735,565 | \$ | 210,049,295 | \$ | 10,404,784,860 | \$ | 10,379,808,684 |

See accompanying notes to financial statements.

## NOTE A--DESCRIPTION OF THE SYSTEM

The following brief description of the Teachers' Retirement System of Oklahoma (the "System") is provided for general information purposes only. Participants should refer to Title 70 of the Oklahoma Statutes, 1991, sections 17-101 through 121, as amended.

The System was established as of July 1, 1943, for the purpose of providing retirement allowances and other specified benefits for qualified persons employed by state-supported educational institutions. The System is a part of the state of Oklahoma financial reporting entity, which is combined with other similar funds to comprise the fiduciary-pension trust funds of the state of Oklahoma (the "State"). The supervisory authority for the management and operation of the System is a 13-member board of trustees, which acts as a fiduciary for investment of the funds and the application of plan interpretations. The System administers a cost-sharing multiple-employer pension plan which is a defined benefit pension plan ("DB Plan") as well as a tax-deferred defined contribution plan ("DC Plan").

## DB Plan

Oklahoma teachers and other certified employees of common schools, faculty and administrators in public colleges and universities, and administrative personnel of state educational boards and agencies who are employed at least half-time, must join the System's DB Plan. Membership is optional for all other regular employees of public educational institutions who work at least 20 hours per week. The DB Plan's membership consisted of the following as of June 30:

|  | 2012 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: |
| Retirees and beneficiaries currently receiving benefits | \$ | 52,716 | \$ | 50,829 |
| Terminated vested clients |  | 8,687 |  | 7,725 |
| Active clients |  | 87,778 |  | 88,085 |
|  | \$ | 149,181 | \$ | 146,639 |

There are 614 contributing employers in the System. In addition, there were 8,564 and 7,498 of non-vested inactive members at June 30, 2012 and 2011, respectively, which are entitled to a refund of their accumulated contributions.

## DC Plan

Members are also offered a tax-deferred defined contribution plan qualified under the Internal Revenue Code ("IRC") Section 403(b). The DC Plan is also referred to by the System as the TaxSheltered Annuity Plan. Membership in the DC Plan is voluntary and investments primarily consist of mutual funds and are participant directed. ING is responsible for administrative services, including custody and record keeping services.

## NOTE A--DESCRIPTION OF THE SYSTEM--Continued

## DC Plan--Continued

The DC Plan had approximately 4,190 and 4,408 participants as of June 30, 2012 and 2011, respectively. Contributions are voluntary and require a minimum of $\$ 200$ per year. The maximum deferral amount is the lesser of $100 \%$ of the participant's compensation or the maximum amount allowed by the IRC, currently $\$ 17,000$.

## NOTE B--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting: The System has prepared its financial statements in accordance with accounting principles generally accepted in the United States of America and using the economic resources measurement focus. The financial statements are prepared using the accrual basis of accounting, under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period they are earned and become measurable, and investment purchases and sales are recorded as of their trade dates. Member and employer contributions are established by Oklahoma Statutes as a percentage of salaries and are recognized when due, pursuant to formal commitments, as well as statutory or contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Oklahoma Statutes. Administrative expenses are funded through investment earnings.

Budgetary Control: The System prepares and submits an annual budget of operating expenses on the cash basis for monitoring and reporting to the Oklahoma Office of State Finance. The System's budget process follows the budget cycle for State operations as outlined by the Oklahoma Office of State Finance.

The Executive Director may approve changes within the budget, but a change to the total budget must be handled according to the provision of Title 62 O.S. Sec. 41.12 of the Oklahoma Statutes.

Investments: The System is authorized to invest in eligible investments as approved by the board of trustees as set forth in the System's investment policy.

## NOTE B--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES--Continued

Investments--Continued: System investments are reported at fair value. The short-term investment fund is comprised of an investment in units of commingled trust funds of the System's custodial agent, which is reported at cost, which approximates fair value. Debt and equity securities are reported at fair value, as determined by the System's custodial agent, using pricing services or prices quoted by independent brokers based on the latest reported sales prices at current exchange rates for securities traded on national or international exchanges. The Security Lending Institutional Daily Assets Fund represents investment in JP Morgan's Institutional Daily Assets Fund and is carried at amortized cost, which approximates fair value.

The System also invests as a limited partner in alternative investments. These investments employ specific strategies such as leverage buyouts, venture capital, growth capital, distressed investments and mezzanine capital. The strategies of all such funds are long term and illiquid in nature. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. Alternative investment partnerships are valued using their respective net asset value (NAV), and are audited annually. The most significant input into the NAV of such an entity is the fair value of its investment holdings. These holdings are valued by the general partners on a quarterly or semi-annual basis, in conjunction with management and investment advisors, and consultation with valuation specialists. The management assumptions are based upon the nature of the investment and the underlying business. The valuation techniques vary based upon investment type and involve a certain degree of expert judgment.

The System's real estate investments are primarily through limited partnerships. Properties owned by the partnership are subject to independent third-party appraisals performed in accordance with the Uniform Standards of Professional Appraisal Practice once every year. The System's real estate investments are long term and illiquid in nature. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. Limited partner interests are valued by the System using the NAV of the partnership. The most significant input into the NAV of such an entity is the value of its investment holdings. These holdings are valued by the general partners on a continuous basis, audited annually and may be periodically appraised by an independent third party. The valuation assumptions are based upon both market and property specific inputs which are not observable and involve a certain degree of expert judgment.

Net investment income includes net appreciation (depreciation) in the fair value of investments, interest income, dividend income, investment income from foreign currency translation gains and losses, securities lending income and expenses, and investment expenses, which includes investment management and custodial fees and all other significant investment related costs.

## NOTE B--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES--Continued

Investments--Continued: International investment managers use forward foreign exchange contracts to enhance returns or to control volatility. Currency risks arise due to foreign exchange rate fluctuations. Forward foreign exchange contracts are negotiated between two counter-parties. The System could incur a loss if its counter-parties failed to perform pursuant to the terms of their contractual obligations. At June 30, 2012, the System had forward currency contracts with fair values of $\$ 62.7$ million in receivables and had forward currency contracts with fair values of $\$ 61.4$ million in payables. The gains and losses on these contracts are included in the income in the period in which the exchange rates change. See Note $C$ for additional information regarding investment derivatives as of June 30, 2012.

The System's investment policy provides for investment diversification of stocks, bonds, fixed income securities, real estate, alternative investments and other investment securities along with investment in commingled or mutual funds. Investment securities and investment securities underlying commingled or mutual fund investments are exposed to various risks, such as interest rate, market, and credit risks. Due to the risks associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities may occur in the near term and those changes could materially affect the amounts reported in the statements of plan net assets.

Capital Assets: Capital assets are stated at cost when acquired, net of accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from five to ten years.

Risks and Uncertainties: Contributions to the System and the actuarial information included in the required supplementary information are reported based on certain assumptions pertaining to interest rates, inflation rates, employee compensation, and demographics. Due to the changing nature of these assumptions, it is at least reasonably possible that changes in these assumptions may occur in the near term and, due to the uncertainties inherent in setting assumptions, that the effect of such changes could be material to the financial statements.

Income Taxes: The System is exempt from federal and state income taxes and has received a favorable determination from the Internal Revenue Service (the "IRS") under Internal Revenue Code (the "IRC") Section 401(a). The System's 403(b) Plan is also tax exempt and has received a private letter ruling from the IRS.

## NOTE B--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES--Continued

Compensated Absences: It is the State's policy to permit employees to accumulate earned but unused vacation and sick leave. Employees earn annual vacation leave based upon their start date and years of service. All accrued vacation leave is payable upon termination, resignation, retirement, or death. Sick leave does not vest to the employee and therefore is not recorded as a liability. Amounts due to the employees for compensated absences were approximately $\$ 282,000$ and $\$ 267,000$ at June 30, 2012 and 2011, respectively.

Plan Termination: In the event the System terminates, the board of trustees will distribute the net assets of the System to provide the following benefits in the order indicated:

Accumulated contributions will be allocated to each respective member, former member, retired member, joint annuitant, or beneficiary then receiving payments.

The balance of such assets, if any, will be allocated to each member then having an interest in the System based upon the excess of their retirement income under the System less the retirement income, which is equal to the actuarial equivalent of the amount allocated to them in accordance with the preceding paragraph in the following order:

- Those retired members, joint annuitants, or beneficiaries receiving payments,
- Those members eligible to retire,
- Those members eligible for early retirement,
- Former members electing to receive a vested benefit, and
- All other members.

Use of Estimates: The preparation of the System's financial statements in conformity with accounting principles generally accepted in the United States of America requires the System's management to make significant estimates and assumptions that affect the reported amounts of net assets held in trust for pension benefits at the date of the financial statements and the actuarial information included in the required supplementary information as of the benefit information date, the changes in System net assets during the reporting period and, when applicable, disclosures of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

## NOTE C--CASH AND INVESTMENTS

Custodial Credit Risk: Custodial credit risk is the risk that in the event of the failure of a counterparty, the System will not be able to recover the value of its bank deposits or investments. Bank deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. In relation to its bank deposits, the System is not considered to be exposed to custodial credit risk. Although the System does not have a formal bank deposit policy for custodial credit risk, the State Treasurer holds all of the System's bank deposits. As required by Oklahoma Statutes, all bank deposits held by the State Treasurer are insured by Federal Deposit Insurance Corporation, collateralized by securities held by the cognizant Federal Reserve Bank, or invested in U.S. government obligations.

At June 30, 2012 and 2011, the carrying amount of the System's bank deposits was approximately $\$ 24,937,000$ and $\$ 14,348,000$, respectively. The bank balance of the System's bank deposits at June 30, 2012 and 2011 was approximately $\$(34,881,000)$ and $\$ 11,459,000$, respectively.

Investment securities are exposed to custodial credit risk if they are uninsured, are not registered in the name of the System, and are held by a counterparty or the counterparty's trust department but not in the name of the System. While the System's investment policy does not specifically address custodial credit risk it does limit the amount of cash equivalents and shortterm investments to no more than 5\% of each manager's portfolio. At June 30, 2012 and 2011, the System had uninsured and uncollateralized cash and cash equivalents of approximately $\$ 275,456,000$ and $\$ 361,798,000$, respectively, with its custodial agent. The System's custodial agent for the years ended June 30, 2012 and 2011 was JP Morgan.

Credit Risk: Fixed-income securities are subject to credit risk. Credit quality rating is one method of assessing the ability of the issuer to meet its obligation. The System's investment policy requires that at the time of purchase all corporate bonds or debentures be at the highest rating of the four rating services recognized by the Comptroller of the Currency of the United States of America.

## NOTE C--CASH AND INVESTMENTS--Continued

## Credit Risk--Continued:

| Investment Type | S\&P Ratings (Unless Noted) | Fair Value |  | Fair Value as <br> a Percent of Total <br> Fixed Income Fair Value |
| :---: | :---: | :---: | :---: | :---: |
| U.S. corporate bonds |  | (Amounts in Thousands) |  |  |
|  | AAA | \$ | 102,499 | 3.56\% |
|  | AA+ |  | 24,687 | 0.86\% |
|  | AA |  | 7,502 | 0.26\% |
|  | AA- |  | 15,144 | 0.53\% |
|  | A+ |  | 30,218 | 1.05\% |
|  | A |  | 67,067 | 2.33\% |
|  | A- |  | 106,429 | 3.70\% |
|  | BBB+ |  | 77,157 | 2.68\% |
|  | BBB |  | 182,270 | 6.34\% |
|  | BBB- |  | 238,800 | 8.30\% |
|  | BB+ |  | 143,316 | 4.98\% |
|  | BB |  | 137,680 | 4.79\% |
|  | BB- |  | 110,412 | 3.84\% |
|  | B+ |  | 101,840 | 3.54\% |
|  | B |  | 109,050 | 3.79\% |
|  | B- |  | 85,450 | 2.97\% |
|  | CCC+ |  | 41,458 | 1.44\% |
|  | CCC |  | 17,917 | 0.62\% |
|  | CCC- |  | 4,775 | 0.17\% |
|  | CC |  | 1,529 | 0.05\% |
|  | D |  | 3,999 | 0.14\% |
|  | NR |  | 105,316 | 3.70\% |
| Total U.S. corporate bonds |  | \$ | 1,714,515 | 59.64\% |
| International corporate bonds | AA- | \$ | 2,842 | 0.10\% |
|  | A- |  | 2,419 | 0.08\% |
|  | BBB- |  | 1,624 | 0.06\% |
|  | BB+ |  | 1,333 | 0.05\% |
|  | BB- |  | 1,163 | 0.04\% |
|  | B |  | 333 | 0.01\% |
|  | CCC |  | 901 | 0.03\% |
|  | NR |  | 265 | 0.01\% |
| Total international corporate bonds |  | \$ | 10,880 | 0.38\% |

## NOTE C--CASH AND INVESTMENTS--Continued

Credit Risk--Continued:

| Investment Type | S\&P Ratings <br> (Unless Noted) | Fair Value |  | Fair Value as a Percent of Total Fixed Income Fair Value |
| :---: | :---: | :---: | :---: | :---: |
| International government securities |  | (Amounts in Thousands) |  |  |
|  | AAA | \$ | 4,233 | 0.15\% |
|  | AA+ |  | 941 | 0.03\% |
|  | AA |  | 3,059 | 0.11\% |
|  | AA- |  | 1,313 | 0.05\% |
|  | A |  | 394 | 0.01\% |
|  | A- |  | 14,879 | 0.52\% |
|  | BBB+ |  | 9,283 | 0.32\% |
|  | BBB |  | 10,171 | 0.35\% |
|  | BBB- |  | 4,026 | 0.14\% |
|  | BB+ |  | 1,281 | 0.04\% |
|  | BB |  | 5,593 | 0.19\% |
|  | B+ |  | 1,691 | 0.06\% |
|  | B |  | 1,189 | 0.04\% |
|  | NR |  | 7,294 | 0.25\% |
| Total international government securities |  | \$ | 65,347 | 2.26\% |
| Municipal bonds | AA+ | \$ | 284 | 0.01\% |
|  | AA |  | 608 | 0.02\% |
|  | AA- |  | 869 | 0.03\% |
|  | A |  | 1,183 | 0.04\% |
|  | A- |  | 381 | 0.01\% |
|  | BBB+ |  | 777 | 0.03\% |
| Total municipal bonds |  | \$ | 4,102 | 0.14\% |
| U.S. government securities | AGY (1) | \$ | 293,989 | 10.22\% |
|  | AA+ |  | 80,032 | 2.78\% |
|  | A |  | 4,886 | 0.17\% |
|  | A- |  | 278 | 0.01\% |
|  | BBB |  | 1,196 | 0.04\% |
| Total U.S. government securities |  | \$ | 380,381 | 13.22\% |
|  |  | \$ | 2,175,225 | 75.50\% |

(1) U.S. Agency securities - implicity guaranteed by the U.S. Government.

## NOTE C--CASH AND INVESTMENTS--Continued

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. While all investments are subject to market changes, securities invested in index funds are more sensitive to market risk. Although the System's investment policy does not specifically address the duration of fixed-income securities, the System's management does monitor interest rate risk by monitoring the performance of each investment manager. As of June 30, 2012, the System had the following investments with maturities:

| Investment Type | Investment Maturities at Fair Value (in Years) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Amounts in Thousands) |  |  |  |  |
|  | Less <br> than One | $\begin{array}{r} \text { One } \\ \text { to Five } \end{array}$ | $\begin{array}{r} \text { Five } \\ \text { to Ten } \end{array}$ | More than Ten | Total <br> Fair Value |
| U.S. corporate securities |  |  |  |  |  |
| Asset-backed securities | \$ 28,061 | \$ 57,640 | \$ 5,108 | \$ 14,137 | \$ 104,946 |
| CMO/REMIC/CMBS | 72,856 | - | 1,144 | 50,242 | 124,242 |
| Corporate bonds | 66,433 | 437,186 | 800,088 | 181,620 | 1,485,327 |
|  | 167,350 | 494,826 | 806,340 | 245,999 | 1,714,515 |
| International corporate bonds | 3,495 | 3,319 | 3,751 | 315 | 10,880 |
| International government securities | 21,219 | 5,288 | 20,235 | 18,605 | 65,347 |
| Municipal bonds | - | - | - | 4,102 | 4,102 |
| U.S. government securities | 41,928 | 210,157 | 180,100 | 650,151 | 1,082,336 |
|  | \$ 233,992 | \$ 713,590 | \$ 1,010,426 | \$ 919,172 | \$ 2,877,180 |

## NOTE C--CASH AND INVESTMENTS--Continued

Foreign Currency Risk: Foreign currency risk is the potential risk for loss due to changes in exchange rates. The System's investment policy provides that international investment managers invest no more than $30 \%$ of their portfolio's total assets in one or more issuers in a single country, provided that in the U.K. such limit shall be $35 \%$. Investment in cash and cash equivalents, foreign equities, and fixed-income securities as of June 30, 2012 is shown in the following table by monetary unit to indicate possible foreign currency risk.


## NOTE C--CASH AND INVESTMENTS--Continued

Derivative Instruments: The System's investment derivatives include forward currency contracts. These investments are not speculative in nature and do not increase investment risk beyond allowable limits specified in the System's investment policy. The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2012, classified by type, and the changes in fair value of such derivative instruments for the year then ended as reported in the 2012 financial statements are as follows:
(Amounts in Thousands)


A foreign currency forward contract is an agreement that obligates the parties to exchange given quantities of currencies at a pre-specified exchange rate on a certain future date. The fair values of the forward contracts are estimated based on the present value of their estimated future cash flows.

The foreign currency forward contracts subject the System to foreign currency risk because the investments are denominated in international currencies. The risks are described in foreign currency risk schedule where the fair value of the foreign currency contracts in U.S. dollars is presented.

## NOTE D--COMMITMENTS

Commitments: At June 30, 2012, the System has total capital commitments of $\$ 1,187,500,000$. Of this amount, $\$ 465,658,227$ remained unfunded. The following table depicts the total commitments and unfunded commitments, respectively, by asset class.

|  | (Amounts in Thousands) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Total <br> Commitments |  | Unfunded <br> Commitments |  |
| Real Estate | \$ | 450,000 | \$ |  |
| Alternative Investments |  | 737,500 |  | 465,658 |
|  | \$ | 1,187,500 | \$ | 465,658 |

## NOTE E--SECURITIES LENDING ACTIVITY

The System's investment policy and State statutes provide for its participation in a securities lending program. The program is administered by the System's master custodian and there are no restrictions on the amount of loans that can be made. Certain securities of the System are loaned to participating brokers, who must provide collateral in the form of cash, U. S. Treasury or government agency securities, or letters of credit issued by approved banks. Under the terms of the agreement, collateralization of the fair value of the loaned securities must be provided in the amount of $102 \%$ when the security to be loaned and the collateral are in the same currency and $105 \%$ when the loan and collateral currencies are dissimilar.

The fair value of securities on loan at June 30,2012 was approximately $\$ 1,818,359,000$. The underlying collateral for these securities had a fair value of approximately $\$ 1,845,884,000$ at June 30, 2012. Collateral of securities and letters of credit represented approximately $\$ 81,795,000$ of total collateral at June 30, 2012. Because the System cannot pledge or sell collateral securities and letters of credit received unless the borrower defaults, the collateral and related liability are not presented in the accompanying statements of plan net assets. The following table describes the types of securities lent and collateral as of June 30, 2012.

|  | (Amounts in Thousands) <br> Market Value <br> of Securities <br> on Loan |  |  |
| :--- | :--- | ---: | :--- | | Collateral |
| :---: |
| Type of securities on loan |

At June 30, 2012, the System had no credit risk exposure since the amounts the System owed to borrowers exceeded the amounts borrowers owed the System. The contract with the System's lending agent requires it to indemnify the System if the borrowers fail to return the lent securities. In the event of a collateral shortfall due to a loss in value of investments made with cash collateral, such loss would be the responsibility of the System.

## NOTE E--SECURITIES LENDING ACTIVITY--Continued

All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in a separate account for the System in accordance with investment guidelines approved by the System. At June 30, 2012 and 2011, the weighted average maturity of the cash collateral investments was 32 days and 24 days, respectively. The cash collateral investments are structured and maintained by the lending agent's investment desk utilizing an asset and liability methodology designed to manage to an appropriate extent any mismatch between the investment maturities and the System's loans.

## NOTE F--CAPITAL ASSETS

Capital assets consist of the following at June 30:

|  | $\begin{aligned} & \text { (Amounts in Thousands) } \\ & 2012 \quad-\quad 2011 \\ & \hline \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Furniture and fixtures | \$ | 2,602 | \$ | 1,908 |
| Accumulated depreciation |  | $(1,059)$ |  | $(1,033)$ |
| Capital assets, net | \$ | 1,543 | \$ | 875 |

The System has commitments to lease building space as well as leases on certain equipment. The future minimum commitment for operating leases as of June 30, 2012 was approximately $\$ 176,000$. The System's leases are one-year renewable contracts. Rental expense for all operating leases amounted to approximately $\$ 205,000$ and $\$ 213,000$ for the years ended June 30, 2012 and 2011, respectively.

## NOTE G--RESERVE AND DESIGNATED FUNDS

The amount included in the Teachers' Deposit Fund, the Expense Fund, and the Capital Assets Fund is not available to pay regular retirement benefits. A brief description of the major funds is as follows:

## NOTE G--RESERVE AND DESIGNATED FUNDS--Continued

The Teachers' Deposit Fund represents funds in the DC Plan. During FY 2010, the System hired ING as the service provider for the DC Plan. This process was undertaken to steadfastly provide a supplemental retirement program that will enhance the System's clients' retirement future. ING provides a comprehensive educational strategy, an array of investment options, clients have 24 hours a day access to their accounts on line, and dedicated customer service representatives available each weekday from 7:00 am to 7:00 pm.

- The Expense Fund represents funds accumulated to pay for the expense of administering and maintaining the System budgeted for the next fiscal year plus any accrued administrative costs as of the current fiscal year-end.
- The Capital Assets Fund represents the net book value of furniture and fixtures for the System.

The Funds had the following approximate balances at June 30:

|  | (Amounts in Thousands) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2012 |  | 2011 |  |
| Teacher's deposit fund (DC Plan) | \$ | 210,049 | \$ | 223,452 |
| Expense fund |  | 60,615 |  | 61,830 |
| Capital assets fund |  | 1,543 |  | 875 |
|  | \$ | 272,207 | \$ | 286,157 |

## NOTE H--CONTRIBUTIONS

All contribution rates are defined or amended by the Oklahoma Legislature. All active members contribute to the System; however, the employer may elect to make all or part of the contribution for its employees. There are special provisions for members of higher education who joined the System before July 1, 1995. The annual employer contributions reported for the years ended June 30, 2012 and 2011 were $\$ 376,635,234$ and $\$ 364,025,589$ respectively. Employers satisfied $100 \%$ of their contribution requirements for 2012 and 2011.

All members must contribute $7 \%$ of regular annual compensation, not to exceed the member's maximum compensation level, which for the years ended June 30, 2012 and 2011, was the full amount of regular annual compensation.

## NOTE H--CONTRIBUTIONS--Continued

The employers are required to contribute a fixed percentage of annual compensation on behalf of active clients. The employer contribution rate was $7.85 \%$ from July 1, 2007 to December 31, 2007; 8.35\% from January 1, 2008 to June 30, 2008; 8.5\% on July 1, 2008; 9\% from January 1, 2009 to December 31, 2009; and $9.5 \%$ beginning on January 1, 2011 for all remitting entities other than comprehensive and four year regional universities. The employer contribution rate was $7.05 \%$ from July 1, 2007 to December 31, 2007; 7.55\% starting on January 1, 2008; 8.05\% starting on January 1, 2009; and $8.55 \%$ starting on January 1, 2011 for comprehensive and four year universities. The rates for fiscal years 2012 and 2011 are applied on the full amount of the Client's regular annual compensation up to certain limits prescribed by the Internal Revenue Code.

## NOTE I--BENEFITS

The System provides defined retirement benefits based on members' final compensation, age, and term of service. In addition, the retirement program provides for benefits upon disability and to survivors upon the death of eligible members. Title 70 O. S. Sec. 17-105 defines all retirement benefits. The authority to establish and amend benefit provisions rests with the State Legislature.

Benefit provisions include:

- Members become $100 \%$ vested in retirement benefits earned to date after five years of credited Oklahoma service. Members, who joined the System on June 30, 1992, or prior, are eligible to retire at maximum benefits when age and years of creditable service total 80. Members joining the System after June 30, 1992 are eligible for maximum benefits when their age and years of creditable service total 90 . Members whose age and service do not equal the eligible limit may receive reduced benefits as early as age 55, and at age 62 receive unreduced benefits based on their years of service. The maximum retirement benefit is equal to $2 \%$ of final compensation for each year of credited service.
- Final compensation for members who joined the System prior to July 1, 1992 is defined as the average salary for the three highest years of compensation. Final compensation for members joining the System after June 30, 1992 is defined as the average of the highest five consecutive years of annual compensation in which contributions have been made. The final average compensation is limited for service credit accumulated prior to July 1, 1995 to $\$ 40,000$ or $\$ 25,000$, depending on the member's election. Monthly benefits are $1 / 12$ of this amount. Service credits accumulated after June 30, 1995 is calculated based on each member's final average compensation, except for certain employees of the two comprehensive universities.


## NOTE I--BENEFITS--Continued

- Upon the death of a member who has not yet retired, the designated beneficiary shall receive the member's total contributions plus $100 \%$ of interest earned through the end of the fiscal year, with interest rates varying based on time of service. A surviving spouse of a qualified member may elect to receive, in lieu of the aforementioned benefits, the retirement benefit the member was entitled to at the time of death as provided under the Joint Survivor Benefit Option.
- Upon the death of a retired member, the System will pay $\$ 5,000$ to the designated beneficiary, in addition to the benefits provided for the retirement option selected by the member.
- A member is eligible for disability benefits after ten years of credited Oklahoma service. The disability benefit is equal to $2 \%$ of final average compensation for the applicable years of credited service.
- Upon separation from the System, members' contributions are refundable with interest based on certain restrictions provided in the plan, or by the IRC.
- Members may elect to make additional contributions to a tax-sheltered annuity program up to the exclusion allowance provided under the IRC under Code Section 403(b).

At the election of each eligible member initiating receipt of retirement benefits, the System remits between $\$ 100$ and $\$ 105$ per month per eligible retiree to the Oklahoma State and Education Employees Group Insurance Board ("OSEEGIB"), depending on the members' years of service during 2012 and 2011. Such amounts were approximately \$29,597,000 and \$29,405,000 in 2012 and 2011, respectively, and are included in retirement and other benefits expense. Amounts due to OSEEGIB at June 30, 2012 and 2011, respectively are approximately $\$ 2,435,000$ and $\$ 2,424,000$ and are included in benefits in process of payment. The System performs no administrative functions related to the benefits provided by OSEEGIB and the payments have a minimal and declining impact on the operation of the System.

## NOTE J--DEDICATED TAX

The System receives 5.0\% of the State's sales, use, and corporate and individual income taxes collected as dedicated tax. The System receives $1 \%$ of the cigarette taxes collected by the State and receives $5 \%$ of net lottery proceeds collected by the State. The System received approximately $\$ 281,807,000$ and $\$ 251,322,000$ from the State in 2012 and 2011, respectively. Amounts due from the State were approximately $\$ 29,333,000$ and $\$ 27,322,000$ at June 30, 2012 and 2011, respectively.

## NOTE K--PENSION PLAN FOR EMPLOYEES OF THE SYSTEM

The System also makes employer contributions for its employees who are also members of the System. The System's contributions are under the same terms as other participating employers, as discussed in Note H. In addition to the employer contributions, the System also pays the employees' contributions as a fringe benefit. Benefits paid to members that worked for the System are the same as those described in Note I. The total employee contributions paid by the System for its employees were approximately $\$ 161,000, \$ 188,000$, and $\$ 204,000$ for the years ended June 30, 2012, 2011, and 2010, respectively. Total employer contributions paid by the System were approximately $\$ 219,000 \$ 256,000$, and $\$ 251,000$ for the years ended June 30, 2012, 2011, and 2010 respectively. The employer contributions for FY 2012, 2011, and 2010 were $115.9 \%, 77.6 \%$, and $83.6 \%$, respectively, of the actuarial determined annual required contribution amounts and $100 \%$ of the contribution rate amounts determined by the legislature.

## NOTE L--PLAN AMENDMENTS

The 2012 legislative session resulted in no bills with an actuarial impact on the system.

## NOTE M--DB PLAN FUNDING STATUS AND ACTUARIAL INFORMATION

The System's actuary conducts an annual valuation to determine the adequacy of the current employer contribution rates, to describe the current financial condition of the System, and to analyze changes in the System's condition. This valuation shows the funded position of the System decreased from the funding level at June 30, 2011. Based on current statutes for determining the state, federal, and employer contribution rates, the funded period which is the number of years that would be required to amortize the unfunded actuarial accrued liability (the "UAAL") is 22.0 years. The actuarial accrued liability increased by $1,027.2$ million and the actuarial value of assets increased $\$ 229.9$ million. As a result, the System's unfunded actuarial accrued liabilities increased $\$ 797.4$ million to $\$ 8,397.6$ million at June 30,2012 . The funded ratio actuarial value of assets divided by actuarial accrued liability - decreased from $56.7 \%$ to $54.8 \%$.

The decrease in the UAAL is primarily due to a loss on assets with returns of only $1.3 \%$ on a market value basis and $3.3 \%$ on the actuarial value of assets compared to the assumed rate of $8.0 \%$. Based on 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 fiscal year 2013 and decreasing through June 30, 2033 and beyond. The current contribution schedule results in contributions sufficient to cover the interest on the current UAAL plus the normal cost resulting in negative amortization.

## NOTE M--DB PLAN FUNDING STATUS AND ACTUARIAL INFORMATION--Continued

The funded status of the System as of June 30, 2012, the most recent actuarial date, is as follows:

|  | (Amounts in Millions) |  |
| :--- | :---: | :---: |
| Actuarial value of assets (a) | $\$$ | $10,190.5$ |
| Actuarial accrued liability (AAL) (b) | $\$$ | $18,588.0$ |
| Total unfunded actuarial accrued liability (UAAL) (b-a) | $\$$ | $8,397.6$ |
| Funded ratio (a/b) |  |  |
| Covered payroll | $\$$ | $3,924.8$ |
| UAAL as a percentage of covered payroll |  |  |

The Schedule of Funding Progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing relative to the actuarial accrued liability for benefits over time. The figures above (the UAAL, the funded ratio, and the funded period) are based on actuarial calculations that make use of the actuarial value of assets, not the fair value. Asset gains and losses (earnings greater or less than the $8 \%$ investment return assumption) are recognized $20 \%$ per year for five years in the actuarial value of assets; the current actuarial value ( $\$ 10,190.5$ million) is $\$ 4.2$ million smaller than the market value of net assets ( $\$ 10,194.7$ million).

Significant actuarial assumptions employed by the actuary for funding purposes as of July 1, 2012 are as follows:

Funding Method: Costs are developed using the entry age normal cost method (based on a level percentage of covered payrolls). Under the method used for the System, the accrued liability and the present value of future normal costs are determined by summing the individual entry age results for each participant. The normal cost is then determined in aggregate by spreading the present value of future normal costs as a level percentage of expected future covered payrolls. Entry age is defined as the first day service is credited under the System.

Experience gains and losses (i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumption) adjust the unfunded actuarial accrued liability.

Asset Valuation Method: 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.

Amortization: The unfunded actuarial accrued liability is amortized on a percent of pay method over a 30 -year open period.

# NOTE M--DB PLAN FUNDING STATUS AND ACTUARIAL INFORMATION--Continued 

Investment Return: 8\% per annum, compounded annually, (includes inflation of 3\%).
Salary Increases: $4 \%$ to $12 \%$ per year (includes inflation of $3 \%$ and a productivity increase of $1 \%$ ).

## NOTE N--NEW PRONOUNCEMENTS

In December 2010, GASB issued Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements (GASB 62) which is intended to enhance the usefulness of its Codification by incorporating guidance that previously could only be found in certain FASB and AICPA pronouncements. GASB 62 is effective for financial statements for periods beginning after December 15, 2011.

In June 2011, GASB issued Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position (GASB 63) which provides financial reporting guidance for deferred outflows of resources and deferred inflows of resources. Previous financial reporting standards do not include guidance for reporting those financial statement elements, which are distinct from assets and liabilities. GASB 63 is effective for financial statements for periods beginning after December 15, 2011.

In April 2012, the GASB issued Statement No. 65, Items Previously Reported as Assets and Liabilities (GASB 65). GASB 65 provides further guidance on determining which balances currently reported as assets and liabilities should instead be reported as deferred outflows or deferred inflows of resources. GASB 65 is effective for periods beginning after December 15, 2012, and will be applied on a retroactive basis.

In June 2012, the GASB issued Statement No. 67, Financial Reporting for Pension Plans (GASB 67). GASB 67 replaces the requirements of Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans and Statement 50, Pension Disclosures, as they relate to pension plans that are administered through trusts or similar arrangements meeting certain criteria. GASB 67 builds upon the existing framework for financial reports of defined benefit pension plans, which includes a statement of fiduciary net position (the amount held in a trust for paying retirement benefits) and a statement of changes in fiduciary net position. GASB 67 enhances note disclosures and required supplementary information (RSI) for both defined benefit and defined contribution pension plans. GASB 67 also requires the presentation of new information about annual money-weighted rates of return in the notes to the financial statements and in 10-year RSI schedules. The requirements of GASB 67 are effective for fiscal years beginning after June 15, 2013.

## NOTE N--NEW PRONOUNCEMENTS--Continued

In June 2012, the GASB issued Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68). GASB 68 replaces the requirements of Statement No. 27, Accounting for Pensions by State and Local Governmental Employers and Statement No. 50 as they relate to governments that provide pensions through pension plans administered as trusts or similar arrangements that meet certain criteria. GASB 68 requires governments providing defined benefit pensions to recognize their long-term obligation for pension benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits. GASB 68 also enhances accountability and transparency through revised and new note disclosures and RSI. The requirements of GASB 68 are effective for fiscal years beginning after June 15, 2014.

The System is currently evaluating the effects the above GASB Pronouncements will have on its financial statements.

# SCHEDULE OF FUNDING PROGRESS AND SCHEDULE OF EMPLOYERS' CONTRIBUTIONS(UNAUDITED) 

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

| (Dollar Amounts in Millions) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Actuarial <br> Valuation Date | Actuarial <br> Value of Assets $(\mathrm{AVA})(\mathrm{a})$ |  | Actuarial <br> Accrued <br> Liability $(\mathrm{AAL})(\mathrm{b})$ |  | Actuarial <br> Accrued <br> Liability AAL) (b) - (a) |  | Funded Ratio (a/b) | Annual <br> Covered <br> Payroll |  | UAAL as \% of Covered Payroll ((b-a)/c) |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 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\% |
| June 30, 2012 |  | 10,190.5 |  | 18,588.0 |  | 8,397.6 | 54.8\% |  | 3,924.8 | 214.0\% |

## SCHEDULE OF EMPLOYERS' CONTRIBUTIONS (UNAUDITED)

| Fiscal Year <br> Ended <br> June 30, |
| :---: |
| 2007 |
| 2008 |
| 2009 |
| 2010 |
| 2011 |
| 2012 |

Annual

| Required <br> Contribution | Percentage <br> Contributed |
| :---: | ---: |
|  | $93.1 \%$ |
| $590,495,652$ | $101.1 \%$ |
| $714,367,558$ | $86.6 \%$ |
| $742,286,289$ | $83.6 \%$ |
| $822,419,996$ | $77.6 \%$ |
| $588,287,377$ | $115.9 \%$ |

The employer contribution rates are established by the Oklahoma Legislature. The annual required contribution is performed to determine the adequacy of such contribution rates.

Unaudited - see accompanying independent auditor's report.

|  | Year Ended June 30 |  |
| :---: | :---: | :---: |
|  | 2012 | 2011 |
| Investment managers | \$ 34,057,188 | \$ 35,208,804 |
| Investment consultants | 702,000 | 702,000 |
| Investment information services | 22,800 | 22,800 |
| Total investment expenses | \$ 34,781,988 | \$ 35,933,604 |

See accompanying independent auditors' report.

|  | Year Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2012 |  |  | 2011 |
| Salaries and benefits | \$ | 2,937,489 | \$ | 3,293,768 |
| General and miscellaneous |  | 838,699 |  | 826,192 |
| Professional/consultant fees |  | 356,438 |  | 446,770 |
| Travel and related expenses |  | 83,645 |  | 106,717 |
| Depreciation expense |  | 56,918 |  | 43,033 |
| Total administrative expenses | \$ | 4,273,189 | \$ | 4,716,480 |


|  |  | Year Ended June 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2012 |  | 2011 |  |
| Actuarial |  | \$ | 61,709 | \$ | 123,661 |
| Medical |  |  | 8,700 |  | 9,590 |
| Legal |  |  | 101,549 |  | 88,714 |
| Audit |  |  | 46,100 |  | 44,800 |
| Data processing |  |  | - |  | 12,518 |
| Miscellaneous |  |  | 138,380 |  | 167,487 |
|  | Total professional/ consultant fees | \$ | 356,438 | \$ | 446,770 |

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Independent Auditors' Report on<br>Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial<br>Statements Performed in Accordance with Government Auditing Standards

Board of Trustees<br>Teachers' Retirement System of Oklahoma

We have audited the financial statements of Teachers' Retirement System of Oklahoma (the "System"), which is a component unit of the state of Oklahoma, as of and for the year ended June 30, 2012, and have issued our report thereon dated December 11, 2012, which includes explanatory paragraphs related to the System's unfunded actuarial accrued liability, required supplementary information and other supplementary information. We conducted our audit in accordance with U.S. generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

## Internal Control over Financial Reporting

In planning and performing our audit of the financial statements of the System as of and for the year ended June 30, 2012, in accordance with auditing standards generally accepted in the United States of America, we considered the System's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above.

## Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of the Board of Trustees, the Oklahoma State Auditor and Inspector, and management and is not intended to be and should not be used by anyone other than these specified parties.

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$$

Oklahoma City, Oklahoma
December 11, 2012

Oklahoma Teachers
Retirement System

DOMESTIC EQUITY MANAGERS

Advisory Research, Inc., All-Capitalization
Chicago, Illinois
Aronson + Johnson + Ortiz, Mid-Capitalization Core Philadelphia, Pennsylvania
Epoch Investment Partners, Inc., All-Capitalization
New York City, New York
Frontier Asset Management, Mid-Capitalization Growth
Boston, Massachusetts
Hotchkis \& Wiley Investment, Large-Capitalization Value Los Angeles, California
Hotchkis \& Wiley Investment, Mid-Capitalization Value Los Angeles, California
Northern Trust, Domestic Equity Index Chicago, Illinois
Sawgrass Asset Management, LLC, Large-Capitalization Growth Jacksonville Beach, Florida
Shapiro Capital Management Company, Inc., Small-Capitalization Value Atlanta, Georgia
State Street Global Advisory, Domestic Equity Index Boston, Massachusetts
Wellington Management Company, LLP, Mid-Capitalization Growth Boston, Massachusetts

DOMESTIC FIXED INCOME MANAGERS

Hoisington Investment Management Company, Interest Rate Sensitive Austin, Texas
Loomis, Sayles \& Company, LP, Active Boston, Massachusetts
Lord Abbett \& Company, LLC, Core + Active Jersey City, New Jersey
MacKay Shields, LLC, Core + Active New York City, New York
Pacific Investment Management Company, Active Newport Beach, California
Stephens Capital Management, Interest Rate Sensitive Little Rock, Arkansas

## INTERNATIONAL EQUITY MANAGERS

Advisory Research, Inc., Small Capitalization
Chicago, Illinois
Brandes Investment Partners, LP San Diego, California
Causeway Capital Management, LLC Los Angeles, California
Epoch Investment Partners, Inc., Small Capitalization
New York City, New York
Thornburg Investment Management, Inc.
Santa Fe, New Mexico
Wasatch Funds, Small Capitalization Salt Lake City, Utah
Wellington Management Company, LLP, Small Capitalization Boston, Massachusetts

## MASTER LIMITED PARTNERSHIPS

Chickasaw Capital Management Memphis, Tennessee Cushing MLP Dallas, Texas FAMCO
St. Louis, Missouri
PRIVATE EQUITY MANAGERS

Franklin Park, LLC, Private Equity Bala Cynwyd, Pennsylvania

## REAL ESTATE

AEW
Boston, Massachusetts
Heitman Real Estate Chicago, Illinois L \& B Real Estate Dallas, Texas

## ADVISORS AND CONSULTANTS

JP Morgan, World Wide Securities Services, Global Custodian/Securities Lending
New York City, New York
gregorywgroup, Investment Consultant
Tulsa, Oklahoma
Gabriel, Roeder, Smith \& Company, Actuarial Consultant
Dallas, Texas
Cole \& Reed, PC, External Auditor
Office of the Attorney General, Legal Counsel
Oklahoma City, Oklahoma

## STATEMENT OF INVESTMENT POLICIES

The Oklahoma Teachers Retirement System (OTRS) policies and procedures provide for a prudent and systematic investment process on behalf of its members, allowing for reasonable expenses of administration of the Fund, and providing for an orderly means whereby employees may be retired from active service with all pension benefits allowed by Oklahoma statutes. The Standard of Investment for the Board of Trustees in making investments shall be to exercise the judgment, care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like-capacity and familiar with such matters would use in the conduct of an enterprise of a likecharacter.

The Board of Trustees diversifies investments to minimize risk. The investment objectives of the Board, as fiduciaries, are long-term rather than short-term. Board policy takes into consideration actuarial assumptions of the retirement program and any unfunded liabilities.

## INVESTMENT POLICY ALLOCATION

In the pursuit of long-term returns in excess of our 8.0 percent actuarial assumption, while maintaining the goal of capital preservation OTRS has codified diversified policy asset allocation. The resulting diversified portfolio is designed to enhance long-term returns while mitigating short-term variability. To those ends the OTRS policy allocation exposes a 60 percent allocation to domestic and developed market equities, and a 40 percent allocation to fixed income. All investments are managed by external active managers.

## Policy Benchmark



# Fiscal Year-end Allocation 



## INVESTMENTPERFORMANCE

To achieve the investment goals set forth by the OTRS Investment Policy Guidelines, the Board of Trustees employs a strategy of active management. For the Fiscal Year 2012 the Fund realized a, gross of fess, rate of return of 1.8 percent.

This report is prepared by:

Grant Soderberg
Investment Analyst

## FY 12 Strategy Performance



* All returns are calculated on a time-weighted basis

The Board of trustees has established an investment goal to exceed the policy benchmark by at least 1 percent net of fees. Since inception the OTRS Composite has returned 9.05 percent, gross of fees, while the policy benchmark has returned 8.93 percent.

OTRS Composite Returns


[^0]
## Top Ten Holdings

As of the fiscal year ended June 30, 2012 the top ten holdings comprised approximately $\$ 835$ million of the total portfolio. The top ten holdings constituted 8.3 percent of the total portfolio.

| Row Labels | Sum of Market Value |  |
| :--- | ---: | ---: |
| TRS OK-HEITMAN REAL ESTATE | $\mathbf{\$}$ | $161,159,299.00$ |
| TRS OK-AEW REAL ESTATE LP | $158,158,228.00$ |  |
| TRS OK-L\&B REAL ESTATE LP | $126,045,930.00$ |  |
| OTRS LEGACY FUND | $67,834,488.00$ |  |
| PIMCO BRAVO LP | $66,310,032.93$ |  |
| PIMCO DISTRESSED MORTAGE FUND | $56,739,070.91$ |  |
| TBA FHLMC GOLD SINGLE FAMILY 3.50\% MAT 30 YEARS | $53,187,342.00$ |  |
| U S TREA BD STRIPPED PRIN PMT 04.250\% 15/MAY/2039 | $51,198,990.84^{1}$ |  |
| PIMCO DISTRESSED MORTAGAGE FUND II | $47,718,056.70$ |  |
| UNITED STATES TREAS NTS 0.500\% 15/OCT/2014 |  | $46,867,394.56^{1}$ |
| Grand Total | $\mathbf{8 3 5 , 2 1 8 , 8 3 2 . 9 4}$ |  |

${ }^{1}$ Securities are explicitly guaranteed by the United States Government.

* A comprehensive list of the OTRS investments at June 30, 2012 may be obtained by contacting the OTRS Investment Associate.


## Investment Expenses

For the Fiscal Year 2012, investment fees paid to investment management firms employed by the system were as follows:
Investment Manager Fees Paid

| Advisory Research | $1,499,489$ |
| :--- | ---: |
| Aronson+Johnson+Ortiz | 468,798 |
| Brandes Investment Partners | $1,140,191$ |
| Capital Guardian | 510,042 |
| Causeway Capital | $1,233,091$ |
| Chickasaw Capital | $1,126,134$ |
| Epoch | $2,111,878$ |
| Famco | $1,290,145$ |
| Frontier Capitol | $1,812,356$ |
| Greg.W.Group | 175,500 |
| Goldman Sachs Management | 923,695 |
| Hoisington Investment | 445,632 |
| Loomis Sayles and Company | 917,019 |
| Loomis Sayles and Company-Opp Bond | 981,332 |
| Lord Abbett \& Company | 839,465 |
| Lord Abbett \& Company--Opp Bond | 969,955 |
| MacKay Shields LLC | $1,069,560$ |
| MacKay Shields LLC--Opp Bond | $1,096,018$ |
| Merrill Lynch Investment (Hotchkis \& Wiley) | $1,243,565$ |
| Merrill Lynch Investment (Hotchkis \& Wiley Mid Cap) | $1,574,696$ |
| Sawgrass | $1,639,919$ |
| Shapiro Capital | $3,677,733$ |
| Stephens Inc | 419,798 |
| Swank Capital | 584,298 |
| Thornburg Investment Management | $1,719,319$ |
| Tocqueville Asset Management | $2,568,587$ |
| Wasatch | 403,828 |
| Total | $1,637,947$ |


| Row Labels | Sum of Quantity (000) | Sum of Commission Base | Commissions per Share |
| :---: | :---: | :---: | :---: |
| ABEL NOSER | 209,930 | 186,837.70 | 2.23 |
| ABG SECURITIES | 1,078 | 1,708.63 | 2.5 |
| AGORA RIO DE JANEIRO | 361 | 178.33 | 0.2 |
| ANCORA SECURITIES | 4,858 | 8,341.19 | 3.7 |
| ANDOVER BROKERAGE | 256 | 199.68 | 4 |
| ANDOVER CAPITAL PARTNERS | 4,598 | 9,945.47 | 3 |
| AQUASECURITIES | 87 | 98.22 | 2 |
| ARNHOLD \& S BLEICHROEDER | 312 | 956.90 | 4 |
| AURIGA | 619 | 4,099.64 | 5 |
| AVIANSECURITIES | 25 | 45.53 | 2 |
| AVONDALEPARTNERS | 2,299 | 2,303.60 | 4 |
| B RILEY \& CO | 1,451 | 1,651.24 | 4.61 |
| BANCAPOPOLARE | 2,374 | 1,065.93 | 1.26 |
| BANCHILE CORREDORES | 350 | 175.70 | 0.16 |
| BANCOINBURSA | 125 | 251.38 | 0.34 |
| BANCO ITAU | 1,535 | 3,140.61 | 3.18 |
| BANCOSANTANDER | 968 | 2,029.90 | 1.45 |
| BARCLAYSCAPITAL | 361,864 | 395,879.22 | 2.34 |
| BARRINGTON RESEARCH | 2,493 | 6,397.04 | 4.28 |
| BAYERISCHE HYPO UND VEREINSBANK | 399 | 472.02 | 4.16 |
| BAYPOINTTRADING | 20,269 | 14,147.76 | 1.73 |
| BEAR STEARNS \& CO | 103,844 | 147,250.79 | 3.09 |
| BERENBERG BANK | 2,930 | 7,330.86 | 6.08 |
| BLOOMBERG TRADEBOOK | 19,128 | 13,045.30 | 1.8 |
| BMO CAPITAL MARKETS | 11,481 | 12,468.37 | 4.14 |
| BNP PARIBAS SECURITIES | 4,832 | 6,180.13 | 2.28 |
| BNY CONVERGEX EXECUTION SOLUTIONS | 113,169 | 34,629.71 | 1.29 |
| BNYMELLON/VTB CAPITAL | 553 | 830.05 | 3.61 |
| BOENNING \& SCATTERGOOD | 205 | 227.55 | 4 |
| BRADESCO | 2,779 | 6,263.87 | 2.07 |
| BREAN MURRAY CARRET\& CO | 3,581 | 16,522.73 | 4.89 |
| BROAD COURT CAP | 12,046 | 21,176.87 | 4.67 |
| BSE SPECIALIST ACCOUNT | 1,375 | 687.50 | 0.79 |
| BTIG | 73 | 36.50 | 3.63 |
| BUCKINGHAM RESEARCH | 7,626 | 18,729.46 | 3.12 |
| BURKE \& QUICK PARTNERS | 230 | 152.03 | 4 |
| CABRERA CAPITAL MARKETS | 8,593 | 7,587.62 | 2.91 |
| CADARETGRANT | 851 | 14,993.77 | 3 |
| CALYONSECURITIES | 35,013 | 16,281.05 | 1.03 |
| CANACCOROADAMS | 13,988 | 18,743.92 | 3.82 |
| CANTORFITZGERALD | 73,484 | 127,127.32 | 1.66 |
| CAPINSTITUTIONALSERVICES | 69,257 | 62,677.59 | 3.52 |
| CARIS \& CO | 1,662 | 3,011.54 | 4.53 |
| CARNEGIE SECURITIES | 1,045 | 2,035.66 | 2.58 |
| CHARLES RIVER BROKERAGE | 3,031 | 2,812.77 | 1.25 |
| CHEUVREUX DE VIRIEU | 371 | 743.48 | 1.72 |


| CHINA INTL CAPITAL CORP HK SECURITIES | 104 | 158.91 | 0.07 |
| :---: | :---: | :---: | :---: |
| CI NORDIC SECURITIES | 2,779 | 4,240.75 | 1.57 |
| CIBC | 2,419 | 5,176.66 | 3.45 |
| CICCSECURITIES | 374 | 751.74 | 0.73 |
| CIMB-GK SECURITIES | 2,680 | 4,237.08 | 0.1 |
| CITIGROUP | 292,128 | 342,081.89 | 0.7 |
| CJSSECURITIES | 7,330 | 27,817.35 | 3.88 |
| CLSA | 4,273 | 5,157.51 | 0.24 |
| COLLINSSTEWART | 1,063 | 1,480.76 | 1.18 |
| COMPANHIA BRASILEIRA DE LIQUIDACAOE | 4,695 | 5,643.39 | 0.93 |
| CONIFER SECURITIES | 522 | 881.66 | 3 |
| COWEN \& CO | 17,996 | 27,911.80 | 3.88 |
| CRAIG HALLUM | 963 | 5,000.86 | 5 |
| CREDIT AGRICOLE INDOSUEZ | 12,782 | 17,766.98 | 2.96 |
| CREDITLYONNAIS | 14,765 | 23,387.76 | 0.21 |
| CREDIT RESEARCH \& TRADING | 12,621 | 5,111.51 | 1.38 |
| CREDIT SUISSE FIRST BOSTON | 299,734 | 209,214.33 | 0.79 |
| CROWELL WEEDON \& CO | 2,792 | 2,147.05 | 4 |
| CSI US INTITUTIONAL DESK | 5,415 | 5,712.83 | 4.02 |
| CUTTONE \& CO | 2,259 | 3,257.48 | 3.36 |
| D A DAVIDSON \& CO | 11,804 | 27,432.50 | 4.06 |
| DCARNEGIE | 558 | 891.13 | 0.96 |
| DAHLMAN ROSE \& CO | 5,196 | 5,196.00 | 3.9 |
| DAI-ICHI KANGYO BANK | 51 | 61.40 | 1.25 |
| DAIWA CAPITAL MARKETS | 30,806 | 29,080.86 | 0.2 |
| DAVENPORT \& CO | 4,430 | 7,393.67 | 3.76 |
| DBS VICKERS BALLAS | 845 | 2,100.67 | 0.21 |
| DEUTSCHEBANK | 303,851 | 142,202.27 | 1.13 |
| DOUGHERTYCO | 3,033 | 3,606.24 | 4 |
| DOWLING \& PARTNERS | 11,867 | 24,220.55 | 4.47 |
| EUROCLEAR | 419 | 1,420.83 | 3.99 |
| EVERCOREGROUP | 3,776 | 2,042.82 | 3.34 |
| EVOLUTION BEESON GREGORY | 165 | 183.81 | 0.2 |
| EXANE | 1,535 | 2,164.35 | 2.79 |
| FIDELITY CAPITAL MARKETS | 1,814 | 1,141.01 | 3.24 |
| FIRST ANALYSIS SECURITIES | 4,581 | 17,247.47 | 4.96 |
| FIRST CLEARING | 29,515 | 25,973.20 | 3.11 |
| FIRST NEW YORK SECURITIES | 523 | 2,283.42 | 4 |
| FIRST UNION CAPITAL MARKETS | 51,107 | 50,800.36 | 3.55 |
| FOKUS BANK | 1,830 | 5,275.89 | 2.98 |
| FRENCH AMERICAN BANKING | 43,855 | 21,313.53 | 0.87 |
| FRIEDMAN BILLINGS \& REMSEY | 15,229 | 17,086.94 | 3.74 |
| G TRADE SERVICES | 14 | 4.20 | 1.07 |
| GABELLI \& CO | 8,193 | 44,651.85 | 4.46 |
| GILFORD SECURITIES | 9,840 | 6,651.84 | 3 |
| GLEACHER \& CO | 412 | 335.37 | 3 |
| GLOBAL HUNTER SECURITIES | 2,534 | 14,851.77 | 5 |
| GOLDMANSACHS | 218,788 | 310,678.96 | 2.04 |


| GOOD MORNING SHINHAN SECURITIES | 540 | 1,558.98 | 7.59 |
| :---: | :---: | :---: | :---: |
| GREENSTREETADVISORS | 219 | 440.85 | 4 |
| GROUP CREDIT AGRICOLE | 309 | 447.74 | 5.11 |
| GUGGENHEIM CAPITAL MARKETS | 1,611 | 3,052.85 | 4.71 |
| GUZMAN \& CO | 5,467 | 6,401.86 | 2 |
| HANNURISALOMONSECURITIES | 251 | 753.00 | 5.19 |
| HANWHA SECURITIES | 147 | 367.35 | 2.96 |
| HEFLIN \& CO | 374 | 464.13 | 4 |
| HEIGHTSECURITIES | 7,657 | 10,091.93 | 3.86 |
| HIBERNIA SOUTHCOASTCAPITAL | 2,990 | 3,031.86 | 4.04 |
| HOWARD WEIL LABOUISSE FRIEDRICHS | 2,782 | 3,099.15 | 5 |
| HSBC BANK | 4,437 | 9,801.33 | 0.87 |
| HUDSON SECURITIES | 557 | 367.62 | 4 |
| HYUNDAI SECURITIES | 254 | 635.00 | 40.76 |
| IMPERIALCAPITAL | 2,268 | 5,379.70 | 5 |
| ING | 2,152 | 4,631.10 | 1.9 |
| INSTINET | 139,444 | 91,056.93 | 1.33 |
| INTESA SANPAOLO PRIVATE BANKING | 132 | 46.20 | 0.41 |
| INVEMED ASSOCIATES | 800 | 3,948.80 | 5 |
| INVESTEC HENDERSON CROSTHWAITE SECURITIES | 70 | 104.79 | 0.79 |
| ISI GROUP | 37,748 | 45,108.86 | 3.15 |
| ISLAND TRADER SECURITIES | 36,704 | 38,979.65 | 3.95 |
| ITG | 153,116 | 89,419.74 | 0.64 |
| JANNEYMONTGOMERYSCOTT | 15,016 | 21,653.07 | 4.37 |
| JEFFERIES \& CO | 77,452 | 73,269.59 | 2.33 |
| JMPSECURITIES | 1,016 | 1,577.85 | 4.29 |
| JNKSECURITIES | 4,259 | 3,935.32 | 3.12 |
| JOHNSON RICE \& CO | 35,958 | 59,654.32 | 3.1 |
| JONES TRADING INSTITUTIONALSERVICES | 125,275 | 185,031.18 | 1.85 |
| JP MORGAN \& CHASE | 61,482 | 56,747.89 | 1.51 |
| KASASSOCIATES | 180 | 288.00 | 18.27 |
| KAUFMAN BROTHERS | 1,903 | 9,208.62 | 5 |
| KEEFE BRUYETTE \& WOODS | 28,086 | 49,656.05 | 3.39 |
| KEPLEREQUITIES | 483 | 579.12 | 2.06 |
| KEYBANCCAPITAL MARKETS | 27,122 | 31,624.25 | 3.58 |
| KGISECURITIES | 327 | 831.56 | 0.22 |
| KIM ENG SECURITIES | 855 | 2,613.74 | 1.05 |
| KING C L \& ASSOCIATES | 4,448 | 5,012.90 | 3.93 |
| KM PARTNERS | 1,537 | 1,892.05 | 3.92 |
| KNIGHTCAPITAL | 323,948 | 918,068.63 | 3.72 |
| KNIGHTSECURITIES | 55 | 44.33 | 1.09 |
| LAZARD FRERES \& CO | 8,658 | 13,437.22 | 3.84 |
| LEERINK SWANN \& CO | 8,289 | 21,435.35 | 3.75 |
| LEKSECURITIES | 8,128 | 17,442.69 | 4 |
| LIBERUMCAPITAL | 133 | 160.00 | 1.09 |
| LIQUIDNET | 73,827 | 38,833.00 | 1.5 |
| LONGBOW SECURITIES | 11,262 | 14,381.57 | 4.12 |
| LOOP CAPITAL MARKETS | 7,511 | 4,476.56 | 2.59 |


| LYNCH JONES \& RYAN | 44,051 | 40,747.18 | 2.59 |
| :---: | :---: | :---: | :---: |
| MACQUARIEBANK | 31,496 | 47,244.00 | 1 |
| MACRO RISK ADVISORS | 1,167 | 1,263.86 | 4.54 |
| MADISON WILLIAMS \& CO | 883 | 4,777.03 | 3 |
| MAIN FIRST BANK | 2,119 | 2,019.41 | 10.38 |
| MAN FINANCIAL | 607 | 681.05 | 0.81 |
| MAXIM GROUP | 5,140 | 9,642.64 | 5 |
| MEDIOBANCA | 865 | 1,659.07 | 2.65 |
| MEMO | 22 | 35.11 | 2.06 |
| MERRILLLYNCH | 373,102 | 307,809.15 | 0.63 |
| MILLER TABAK HIRSCH \& CO | 869 | 1,347.82 | 3.27 |
| MIRAE ASSETSECURITIES | 183 | 457.32 | 8.2 |
| MISCHLER FINL GROUP | 13,542 | 11,835.71 | 4 |
| MITSUBISHI UFJ SECURITIES | 6,816 | 9,753.70 | 2.73 |
| MIZUHO SECURITIES | 9,925 | 13,934.70 | 3.81 |
| MND PARTNERS | 4,210 | 1,305.10 | 2 |
| MONARCH CAPITAL GROUP | 641 | 4,254.96 | 1.96 |
| MONNESS CRESPI HARDT \& CO | 4,325 | 17,836.30 | 5 |
| MORGAN JOSEPH \& CO | 1,581 | 9,318.41 | 5 |
| MORGAN KEEGAN \& CO | 23,107 | 29,507.64 | 4.13 |
| MORGANSTANLEY | 157,311 | 148,973.52 | 0.98 |
| NATIONAL FINLSVCS | 11,088 | 21,477.46 | 4.57 |
| NEEDHAM \& CO | 10,046 | 37,160.15 | 3.49 |
| NESBITTBURNS | 416 | 554.53 | 3.3 |
| NOMURA | 127,170 | 101,863.17 | 0.18 |
| NORSESECURITIES | 24 | 36.46 | 0.1 |
| NORTHERNTRUSTSECURITIES | 1,160,584 | 198,459.86 | 0.69 |
| NORTHLAND SECURITIES | 704 | 5,038.53 | 3 |
| NUMISSECURITIES | 7,169 | 10,674.64 | 1.57 |
| ODDO | 1,460 | 3,487.94 | 5.87 |
| ONEIL WILLIAM \& CO | 73,558 | 20,449.12 | 1.3 |
| OPPENHEIMER | 45,767 | 66,041.78 | 3.9 |
| PACIFIC CRESTSECURITIES | 5,488 | 11,442.48 | 3.42 |
| PAREL | 91 | 136.86 | 0.52 |
| PCSSECURITIES | 1,154 | 2,901.16 | 5 |
| PELLINORSECURITIES | 724 | 2,529.66 | 4.92 |
| PENSON FINANCIALSVCS | 1,203 | 2,853.52 | 3.12 |
| PERSHING | 8,586 | 12,046.16 | 0.42 |
| PETER \& CO | 39 | 28.12 | 3.5 |
| PICKERING ENERGYPARTNERS | 2,962 | 9,676.85 | 4.97 |
| PIPELINE TRADING | 1,928 | 1,874.02 | 1.75 |
| PIPER JAFFRAY \& CO | 23,410 | 50,659.24 | 4.3 |
| PORTALES PARTNERS | 2,241 | 2,630.93 | 4.75 |
| PULSE TRADING | 37,691 | 22,576.91 | 1.47 |
| RAYMOND JAMES \& ASSOCIATES | 59,851 | 81,576.91 | 3.87 |
| RBCCAPITAL | 70,743 | 103,779.98 | 4 |
| REDBURNPARTNERS | 3,380 | 3,819.40 | 0.77 |
| RENCAPSECURITIES | 63 | 94.56 | 1.38 |


| REYNDERS GRAY \& CO | 861 | 963.46 | 4 |
| :---: | :---: | :---: | :---: |
| RIDGE CLEARING \& OUTSOURCING | 2,857 | 9,922.36 | 4.73 |
| ROBERT W BAIRD \& CO | 48,224 | 50,297.63 | 3.83 |
| RODMAN \& RENSHAW | 2,784 | 10,158.82 | 4.93 |
| ROSENBLATT SECURITIES | 19,880 | 12,762.96 | 0.79 |
| ROTH CAPITAL PARTNERS | 4,729 | 12,985.83 | 5 |
| ROYAL BANK OF SCOTLAND | 2,415 | 3,096.03 | 2.88 |
| SALOMON SMITH BARNEY | 9,534 | 4,795.60 | 0.11 |
| SAMSUNG SECURITIES | 124 | 310.00 | 12.21 |
| SANDLER O'NEILL \& PARTNERS | 4,640 | 1,693.60 | 3 |
| SANFORD C BERNSTEIN | 148,198 | 161,684.02 | 1.72 |
| SCOTIACAPITAL | 2,021 | 1,360.13 | 5 |
| SCOTIA MCLEOD | 419 | 330.59 | 1.35 |
| SCOTT \& STRINGFELLOW | 4,433 | 5,647.64 | 4.44 |
| SEB ENSKILDA SECURITIES | 251 | 401.85 | 3.19 |
| SG AMERICAS SECURITIES | 223,434 | 80,436.24 | 0.99 |
| SIDOTI \& CO | 14,400 | 44,150.40 | 3.42 |
| SIMMONS \& CO | 4,986 | 6,526.67 | 4.17 |
| SIS SEGAINTERSETTLE | 306 | 456.55 | 0.83 |
| SOCIETEGENERALE | 28,199 | 22,643.80 | 1.24 |
| STANDARD CHARTERED BANK | 23 | 39.24 | 0.09 |
| STATE STREET BANK | 334,301 | 166,816.20 | 0.3 |
| STEPHENS | 6,901 | 25,616.51 | 3.11 |
| STERNE AGEE \& LEACH | 20,333 | 41,580.99 | 3.86 |
| STIFEL NICOLAUS \& CO | 22,649 | 39,726.35 | 4.09 |
| STRATEGAS SECURITIES | 1,569 | 878.64 | 3 |
| SUNTRUST CAPITAL MARKETS | 6,704 | 14,427.01 | 4.46 |
| SVENSKA HANDELSBANKEN | 4,087 | 7,520.08 | 2.42 |
| TAYLOR BYRNE SECURITIES | 446 | 667.22 | 1.6 |
| TAYLOR D W \& CO | 418 | 375.78 | 4 |
| THEMISTRADING | 164,018 | 55,930.14 | 2 |
| TORONTO DOMINIONSECURITIES | 1,182 | 2,324.99 | 3.72 |
| UBS | 107,728 | 116,453.97 | 1.64 |
| UOB KAY HIAN PTE | 3,557 | 10,681.67 | 0.5 |
| WACHOVIA CAPITAL MARKETS | 6,069 | 7,161.42 | 4 |
| WEDBUSH MORGAN SECURITIES | 17,612 | 66,414.85 | 3.98 |
| WEEDEN \& CO | 89,194 | 72,157.95 | 1.48 |
| WILLIAM BLAIR \& CO | 22,145 | 49,095.47 | 4.53 |
| WILLIAMS CAPITAL GROUP | 11,583 | 20,698.82 | 4.64 |
| WJB CAPITAL GROUP | 5,349 | 3,669.41 | 3.47 |
| WUNDERLICH SECURITIES | 5,509 | 29,831.24 | 4.24 |
| XP INVESTIMENTOS | 104 | 73.63 | 0.38 |
| Grand Total | 7,482,580 | 7,096,987 | 0.95 |
| Less: Commission Recapture |  | $(742,827)$ |  |
| Adj. Commissions Per Share |  | 6,354,160 | 0.85 |

## Summary of Investments

June 30, 2012

|  | Percentage of |  |
| :--- | :---: | :---: |
| Type of Investment | Fair Value | Total Fair Value |

Fixed Income:
U S Government Securities
Corporate Bonds
International Bonds
Total Fixed Income

Equities:
Domestic
International
Total Equities
Short-Term Investments:

| Short-term Investments JP Morgan | $274,979,813$ |
| :--- | ---: |
| Money Markets | 476,325 |
| Total Short-Term Investments | $275,456,138$ |

Other Investments
Alternative Investments
Real Estate
Total Other Investments
Total Investments

| $283,762,403$ |  |  |
| ---: | ---: | ---: |
| $472,317,628$ |  |  |
|  |  | $2.78 \%$ |
| $, 080,031$ | $4.63 \%$ |  |
|  |  | $7.41 \%$ |

Comparative Rates of Return Fiscal Year 2012


Comparative Rates of Return Fiscal Year 2011


Comparative Rates of Return Fiscal Year 2010


## Investment Managers

The Board of Trustees has hired the following investment management firms to manage the assets of the System. The investment managers have full discretion in the management of assets in their portfolios, subject to individual investment styles and the overall guidelines of the System's Investment Policy.

## Funds Under Management <br> (in millions)

Advisory Research, Inc ..... 397
AEW ..... 158
Aronson+Johnson+Ortiz Partners, LP ..... 323
Brandes Investment Partners, LP ..... 345
Capital Guardian Trust Company ..... 0
Causeway Capital Management, LLC ..... 382
Chickasaw Capital Management ..... 145
EPOCH Investment Partners, Inc ..... 391
Fiduciary Asset Management ..... 262
Franklin Park ..... 113
Frontier Capital Management Company, LLC ..... 341
Goldman Sachs Asset Management ..... 0
Heitman Real Estate ..... 161
Hoisington Investment Management ..... 298
Hotchkis and Wiley Capital Management, LLC ..... 704
Internal Cash Account ..... 6
L \& B Real Estate ..... 153
Loomis, Sayles \& Company, LP ..... 789
Lord Abbett \& Company, LLC ..... 779
McKay Shields, LLC ..... 782
Northern Trust Index ..... 439
Pacific Investment Management Company ..... 171
Sawgrass Asset Management, LLC ..... 354
Shapiro Capital Management Company, Inc ..... 503
SSGA Index ..... 434
Stephens Capital Management, Inc ..... 288
Swank Capital ..... 130
Thornburg Investment Management, Inc ..... 374
Tocqueville Asset Management, LP ..... 417
Wasatch ..... 84
Wellington Management Company, LLP ..... 370
Total funds under management ..... 10,094

Assets Managed (In Millions)


## Rates of Return

| Periods Ended June 30 | One Year | Three Years | Five Years |
| :--- | :---: | :---: | :---: |
| Domestic Equity | $-0.8 \%$ | $16.3 \%$ | $0.2 \%$ |
| S\&P 500 | $2.0 \%$ | $13.2 \%$ | $2.0 \%$ |
| Rank ** | $54^{*}$ | 52 | 60 |
| International Equity | $-12.2 \%$ | $7.4 \%$ | $-4.3 \%$ |
| MSCI EAFE | $-14.1 \%$ | $7.4 \%$ | $-4.2 \%$ |
| Rank ** | 41 | 62 | 46 |
| Fixed Income | $13.0 \%$ | $10.7 \%$ | $9.4 \%$ |
| Barclay's Aggregate | $7.5 \%$ | $6.9 \%$ | $6.8 \%$ |
| Rank | 20 | 17 | 9 |
| Total Fund | $1.8 \%$ | $13.6 \%$ | $2.7 \%$ |
| Benchmark*** | $2.0 \%$ | $13.2 \%$ | $2.0 \%$ |
| Rank ** | 33 | 4 | 24 |

* Rank 1 is best, 100 worst
** Source of Ranking - TUCS
*** Benchmark - 2.0\% S\&P 500, -1.7\% Russell Mid Cap, -2.1\% Russell 2000, -14.1\% MSCI EAFE, 7.5\% Barclays Capital Aggregate

Oklahoma Teachers
Retirement System

# CR $\begin{aligned} & \text { Gabriel Roeder Smith \& Company } \\ & \text { Consultants \& Actuaries }\end{aligned}$ 

TEACHERS'RETIREMENT SYSTEM OF OKLAHOMA ANNUAL ACTUARIAL VALUATION
AS OF JUNE 30, 2012

December 20, 2012

Board of Trustees
Teachers' Retirement System of Oklahoma
Oliver Hodge Education Building
2500 N. Lincoln Boulevard, $5^{\text {th }}$ Floor
Oklahoma City, Oklahoma 73105
Dear Members of the Board:

## Subject: Actuarial Valuation as of June 30, 2012

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, 2012. 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 30 of each year, the last day of the System's plan and fiscal year.

## Financing Objectives

The member, employer, State, and "grant 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 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 30 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 $5.00 \%$, and no changes are scheduled in this rate. Additionally, the System receives "grant matching" contributions from employers for positions whose funding comes from federal sources or certain grants. The matching contribution rate for FY 2012 was $7.00 \%$ and it will increase to $8.00 \%$ for FY 2013. This 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 for FY 2013, based on information presented to the State's Equalization Board, is projected to be $\$ 286$ million. Therefore, we project that in the fiscal year ending June 30, 2013, the State's contribution plus the matching contribution will be equivalent to a contribution rate of approximately $7.8 \%$ 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 17.2\% of covered payroll for FY 2013 (7.8\% + $9.4 \%=17.2 \%)$.

The State, local and matching 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, 2011 was $\$ 7.600$ billion, and it increased to $\$ 8.398$ billion this year. As a result, the System's funded ratio-actuarial value of assets divided by the actuarial accrued liability-decreased from $56.7 \%$ to $54.8 \%$ as of June 30, 2012. These decreases were primarily due to a loss on assets with returns of only $1.3 \%$ on a market value basis and $3.3 \%$ on the actuarial value of assets compared to the assumed rate of $8.0 \%$.

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. This is the same as in the previous actuarial valuation despite the experience losses. The impact of SB377, which is discussed on the next page, is reflected in the current valuation. It decreased the normal cost rate by $0.49 \%$ which allows more contributions to be applied to amortizing the UAAL. Based upon the current contribution schedule, assuming no actuarial gains or losses in the future, the UAAL is expected to exhibit volatility over the next 4 years as deferred asset gains and losses are fully recognized. After that, it is then estimated that the UAAL should trend down to zero over the following 18 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 $\$ 10.190$ billion is $\$ 4$ million lower than the market value of $\$ 10.195$ billion, and the actuarial value of assets is approximately $100 \%$ of the market value. The funded ratio determined using the market value of assets rather than the actuarial value is $54.8 \%$.

## Benefit Provisions

Our actuarial valuation as of June 30, 2012 reflects the benefit and contribution provisions set forth in current statutes. There were no bills enacted during the 2012 State of Oklahoma legislative session with an actuarial impact.

SB 377 was enacted during the 2011 State of Oklahoma legislative session. This bill changed the retirement eligibility requirements and early retirement factors for new employees who become members of the System on or after November 1, 2011. The new provisions were not reflected in our prior valuation because some of the language of the bill was unclear. As a result of clarifications received over the past year, the impact of SB 377 has been fully reflected in this valuation. The impact of SB377 lowered the funding period by one year and decreased the normal cost rate, the rate at which members accrue benefits as a percentage of pay, by 49 basis points.

A summary of all plan provisions included in this valuation is included in Appendix I.

## 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.

The retirement assumption for members hired on or after November 1, 2011 was modified to incorporate the change to the retirement eligibility for this group. Since there is no experience for this group on which to base this assumption, the modified retirement rates were based on the retirement patterns adopted in conjunction with the 2009 Experience Study and incorporate an increased demand for retirement at later ages since most members must now wait longer to retire.

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.

A summary of the actuarial methods and assumptions incorporated into this valuation is included in Appendix III.

## DATA

Member data for retired, active, and inactive participants was supplied as of June 30, 2012 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, 2012 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.

## ATTACHEDSCHEDULES

We prepared all of the schedules and exhibits in this section except for the Schedule of Increases and Decreases of Benefit Recipients which was prepared by the System's staff. We have also prepared the Schedule of Funding Progress and the Schedule of Employer Contributions in the Financial Section. We have prepared the annual actuarial valuations each year, beginning with the one prepared as of June 30, 1989. Information related to earlier actuarial valuations was prepared by the previous actuary for the System.

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, FCA, MAAA, EA
Executive Vice President



Brad Stewart, ASA, EA, MAAA
Consultant

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## Executive Summary

| Item | 2012 | 2011 |
| :---: | :---: | :---: |
| Membership <br> - Number of <br> - Active members <br> - Retirees and beneficiaries <br> - Inactive, vested <br> - Inactive, nonvested <br> - Total <br> - Payroll | 87,778 <br> 52,716 <br> 8,687 <br> 8,564 <br> 157,745 <br> $\$ 3,925$ million | 88,085 <br> 50,829 <br> 7,725 <br> 7,498 <br> 154,137 <br> $\$ 3,773$ million |
| Statutory contribution rates <br> - Employers in EESIP <br> - Regional universities <br> - Federal/grant salaries <br> - Members <br> - $\quad$ State (\% of tax revenues) | $\begin{array}{r} \text { FY } 2013 \\ 9.50 \% \\ 8.55 \% \\ 8.00 \% \\ 7.00 \% \\ 5.00 \% \end{array}$ | $\begin{array}{r} \text { FY } 2012 \\ 9.50 \% \\ 8.55 \% \\ 7.00 \% \\ 7.00 \% \\ 5.00 \% \end{array}$ |
| Assets <br> - Market value <br> - Actuarial value <br> - Return on market value <br> - Return on actuarial value <br> - State/local/federal contributions <br> - External cash flow \% <br> - Ratio of actuarial to market value | $\$ 10,195$ million $\$ 10,190$ million $1.3 \%$ $3.3 \%$ $\$ 682$ million $-1.0 \%$ $100.0 \%$ | \$ 10,156 million \$ 9,961 million 22.7\% 5.0\% \$ 638 million -0.8\% 98.1\% |
| Actuarial Information <br> - Normal cost $\%$ <br> - Unfunded actuarial accrued liability (UAAL) <br> - Funded ratio <br> - Funding period (years) | $\begin{array}{r} 9.81 \% \\ \$ 8,398 \text { million } \\ 54.8 \% \\ 22 \end{array}$ | $\begin{array}{r} 10.30 \% \\ \$ 7,600 \text { million } \\ 56.7 \% \\ 22 \end{array}$ |
| GASB 25 ARC (30 year, level \%) <br> - Dollar amount <br> - Percent of pay | $\begin{array}{r} \text { FY } 2013 \\ \$ 619,805,640 \\ 15.06 \% \end{array}$ | $\begin{array}{r} \text { FY } 2012 \\ \$ 588,287,377 \\ 14.87 \% \end{array}$ |
| Gains/(losses) <br> - Asset experience <br> - Liability experience <br> - Benefit changes <br> - Legislative Changes <br> - Assumption Changes <br> - Total | $\begin{array}{r} \text { (\$468) million } \\ (180) \text { million } \\ 0 \text { million } \\ (130) \text { million } \\ 0 \text { million } \\ \hline \text { (\$778) million } \end{array}$ | (\$289) million 329 million 177 million 2,965 million 0 million $\$ 3,182$ million |

## INTRODUCTION

The results of the June 30, 2012 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.

## FUNDEDSTATUS

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 increased by $\$ 798$ million, from $\$ 7.600$ billion to $\$ 8.398$ billion as of June 30, 2012. The funded ratio - the ratio of the actuarial value of assets to the actuarial accrued liability decreased from $56.7 \%$ to $54.8 \%$ as of June 30, 2012. The decrease in the funded status is due mainly to the asset losses discussed in Section E of this report. A detailed summary of the changes in UAAL is included in Table 12a.

The funding period - the number of years that would be required under the current contribution schedule to amortize the UAAL - remains at 22 years due primarily to the inclusion of SB377 in this valuation. Projections show that it will take about fifteen years for the plan to reach $80 \%$ funded, assuming the market value of the fund earns $8.00 \%$ each year, experience follows our other assumptions, and no changes are made to the contribution and benefit provisions.

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 $15.06 \%$ of projected active member payroll as shown in Table 1, compared to $14.87 \%$ last year. As of June 30, 2012, our projections show that the ARC is expected to trend downward towards the annual employer normal cost rate of $2.81 \%$ over the next 22 years at which time the UAAL is projected to be zero.

## 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 $\$ 7.600$ billion last year, has increased to $\$ 8.398$ billion this year.

The increase in the UAAL was primarily due to the significant loss on assets that increased the UAAL by $\$ 468$ million. As discussed in Section E, the return on assets was only $3.3 \%$ on an actuarial value basis compared to the assumed rate of $8.0 \%$.

## Funding Period

As noted in Table 1 under Section K of our report, the funding period (the period required to amortize the UAAL) has remained at 22 years. The increases in the UAAL due to asset and liability losses were offset by the impact of SB377 which decreased the normal cost rate by $0.49 \%$. The normal cost is the amount needed to fund next year's benefit accrual, so lowering the normal cost allows for more contributions to be used to pay down the UAAL.

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, and (e) employer and State contributions will remain at approximately $17.2 \%$ of payroll each year.

## 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 $\$ 10.156$ billion to $\$ 10.195$ billion as of June 30, 2012. 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 $65 \%$ to about $67 \%$ of total invested assets.

Table 7 reconciles the changes in the fund during the year. Employer contributions increased slightly from $\$ 364.0$ million to $\$ 376.6$ million, due to an increase in active-member payroll. The State's contribution increased from $\$ 251.3$ million to $\$ 281.8$ million, reflecting increased State tax revenues. Active member contributions increased slightly from $\$ 286.6$ million to $\$ 291.4$ 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 on the market value 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 slightly less than $100 \%$ of market value.

Table 9a provides a calculation of the estimated investment return for the year. As shown, the approximate investment return for FY 2012 is $1.3 \%$ when measured on market value and $3.3 \%$ when measured on actuarial value. Table 9b shows a history of return rates since FYE 1993. The plan's ten-year average market return, net of investment expenses, is $7.2 \%$.

Table 10 shows an external cash flow history. External cash flow is a negative $1.0 \%$ of assets this year. Table 11a shows the development of the asset loss of $\$ 467.9$ million due to the recognition of prior deferred losses and a return on market value less than expected. The actuarial value of assets does not recognize $\$ 4.3$ million in deferred investment gains which will be recognized over the next four years, if not offset by future negative experience.

## 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 bills passed in the 2012 legislative session that impacted the System, but none of them will have an actuarial impact on the annual valuation.

SB 377, which was passed during the 2011 legislative session, changed the retirement eligibility requirements and early retirement factors for new employees who become members of the System on or after November 1, 2011. The new provisions were not reflected in our prior valuation because some of the language of the bill was unclear. As a result of clarifications received over the past year, the impact of SB 377 has been fully reflected in this valuation.

## GASB 25 DISCLOSURES

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

Table 4 a shows a history of funding progress. The funded ratio decreased from $56.7 \%$ as of June 30, 2011 to $54.8 \%$ as of June 30, 2012. The decrease in the funded ratio as of June 30, 2012 occurred primarily due returns on assets below the assumed rate of $8.0 \%$.

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 redetermined 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 grant matching funds, plus the State's contribution. For FY 2012, the System received 115.9 \% of its ARC compared with $77.6 \%$ for FY 2011. We expect the actual future contributions, made per the statutes, will continue to exceed the ARC, and 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 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.

## 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 377, the retirement assumption for members hired on or after November 1, 2011 was modified to incorporate the change to the retirement eligibility for this group. Since there is no experience for this group on which to base this assumption, the modified retirement rates were based on the retirement patterns adopted in conjunction with the 2009 Experience Study and incorporate an increased demand for retirement at later ages since most members must now wait longer to retire.

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.

## MEMBERSHIPDATA

Data on all members of the System, whether active, receiving a benefit, or entitled to a future benefit, was supplied by the System.

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.

Item V of Appendix III of our report provides more detail about the processing of membership data for valuation purposes.

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 $0.3 \%$ decrease in the number of active members since the previous valuation and a $4.0 \%$ increase in the payroll for active members based on the data provided.

Membership has shrunk an average of $0.1 \%$ per year over the last five years, but it has increased by an average of $0.3 \%$ per year over the last ten years. Payroll for covered members (without regard to the pay caps) has grown an average of $1.7 \%$ over the last five years, and it has grown at an average of $2.6 \%$ 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 1.3 years during the last ten years. During the same period, the average tenure of members has increased 0.5 years.

## Development of Employer Cost

1. Payroll
a. Supplied by System
b. Adjusted for one year's pay increase
2. Present value of future pay (paid monthly)
3. Normal cost rate (payable monthly)
a. Total normal cost rate
b. Less: member rate
c. Employer normal cost rate
4. Actuarial accrued liability for active members
a. Present value of future benefits for active members
b. Less: present value of future employer normal costs (Item 3c * Item 2)
c. Less: present value of future member contributions
d. Actuarial accrued liability
5. Total actuarial accrued liability for:
a. Retirees and beneficiaries
b. Inactive members
c. Active members (Item 4d)
d. Total
6. Actuarial value of assets
7. Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)
8. Funding period based on statutory contribution rates (years)
9. GASB 25 ARC

| a. Employer normal cost (Item 1b * 3c) | \$ | 115,643,485 | \$ | 135,809,075 | \$ | 130,531,191 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| b. Level \% 30-year amortization of UAAL (payable monthly) |  | 504,162,155 |  | 496,357,638 |  | 457,756,186 |
| c. Total | \$ | 619,805,640 | \$ | 632,166,713 | \$ | 588,287,377 |
| d. Contributions as percentage of payroll |  | 15.06\% |  | 15.36\% |  | 14.87\% |

## Actuarial Present Value of Future Benefits

1. Active members
a. Service retirement benefits
b. Deferred termination benefits
c. Refunds
d. Death benefits
e. Disability retirement benefits
f. Supplemental medical insurance
g. $\$ 5,000$ post-retirement death benefit
h. Total
2. Retired members
a. Service retirements
b. Disability retirements
c. Beneficiaries
d. Supplemental medical insurance
e. $\$ 5,000$ post-retirement death benefit
f. Total

| $\$$ | $8,746,702,421$ |  | $\$ 8,288,153,697$ |
| :---: | ---: | :--- | ---: |
|  | $151,392,878$ |  | $148,941,948$ |
|  | $311,261,043$ |  | $294,671,199$ |
|  | $519,955,322$ |  | $503,239,153$ |
|  | $84,913,616$ |  | $81,583,141$ |
|  | $9,814,225,280$ |  | $\$, 316,589,138$ |


| \$ | $10,349,435,032$ |  | $\$ 9,943,371,918$ |
| :--- | ---: | ---: | ---: |
|  | $478,088,259$ |  | $459,505,975$ |
|  | $24,323,023$ |  | $22,340,427$ |
|  | $156,895,297$ |  | $152,486,497$ |
|  | $270,144,707$ |  | $257,261,827$ |
|  | $336,903,102$ |  | $340,668,099$ |
|  | $31,265,974$ |  | $31,272,622$ |
|  | $11,647,055,394$ |  | $\$ 11,206,907,365$ |

3. Inactive members

| a. Vested terminations | \$ | 377,821,804 | \$ | 321,841,472 |
| :---: | :---: | :---: | :---: | :---: |
| b. Nonvested terminations |  | 32,341,977 |  | 28,463,975 |
| c. Suspense fund |  | 33,610,237 |  | 29,629,143 |
| d. Total | \$ | 443,774,018 | \$ | 379,934,590 |

4. Total actuarial present value of future benefits
\$ 21,905,054,692
\$ 20,903,431,093

## Analysis of Normal Cost

June 30, $2012 \quad$ June 30, 2011

1. Gross normal cost rate (payable monthly)
a. Retirement benefits

| $7.08 \%$ | $7.72 \%$ |
| :--- | :--- | :--- |
| $1.49 \%$ | $1.30 \%$ |
| $0.63 \%$ | $0.59 \%$ |
| $0.20 \%$ | $0.25 \%$ |
| $0.04 \%$ | $0.04 \%$ |
| $0.07 \%$ | $0.10 \%$ |
| $0.30 \%$ | $0.30 \%$ |
| $9.81 \%$ | $10.30 \%$ |

2. Less: member rate
7.00\%
7.00\%
3. Employer normal cost rate $2.81 \%$ 3.30\%

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

| Valuation <br> Date | Actuarial Value of Assets (AVA) | Actuarial Accrued Liability (AAL) | Unfunded Actuarial Accrued Liability (UAAL) (3) - (2) | Funded Ratio <br> (2)/(3) | Annual Covered Payroll | UAAL as \% of Payroll (4)/(6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 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\% |
| June 30, 2012 | \$10,190.5 | \$18,588.0 | \$8,397.6 | 54.8\% | \$3,924.8 | 214.0\% |

Note: Dollar amounts in millions

## Schedule of Employer Contributions

(As required by GASB \#25)

| Year Ending June 30, | Annual Required Contribution | Percentage Contributed |
| :---: | :---: | :---: |
| 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\% |
| 2012 | \$588,287,377 | 115.9\% |

## 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, 2012 <br> Entry Age Normal |
| :--- | ---: |
| Actuarial cost method | Level percent of payroll, open period |
| Amortization method | 30 years |
| Remaining amortization period | 5-year smoothed market |
| Asset valuation method | $8.00 \%$ |
| Actuarial assumptions: | $4.00 \%$ to $12.00 \%$ |
| Investment rate of return * | $3.00 \%$ |
| Projected salary increase * | $0.00 \%$ |

## Membership Data

1. Active members
a. Number
87,778
$\$ \quad 3,924,843,696$
b. Total payroll supplied by System
\$ 3,924,843,696
c. Average salary
d. Average age
\$ 44,713
88,085
e. Average service
46.2
\$ 3,773,283,867

June 30, 2012

2. Vested inactive members
a. Number
8,687
7,725
b. Total annual deferred benefits ${ }^{1}$
c. Average annual deferred benefit
\$ 66,828,301
\$ 56,602,747
\$ 7,693
\$ 7,327
3. Nonvested inactive members
a. Number
8,564
7,498
b. Member contributions with interest due
\$ 32,341,977
\$ 28,463,975
c. Average refund due
\$ 3,777
\$ 3,796
4. Service retirees

| a. Number | 48,600 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| b. | Total annual benefits ${ }^{1}$ | $\$$ | $931,298,722$ | $\$$ |
| c. | Average annual benefit | $\$$ | 19,163 | $\$$ |

5. Special service retirees

| a. |  |  |  | 13 |
| :--- | :--- | ---: | ---: | ---: |
| bumber | Total annual benefits ${ }^{1}$ | $\$$ | 30,403 | $\$$ |
| c. | Average annual benefit | $\$$ | 2,339 | $\$$ |

6. Disabled retirees
a. Number
1,603
1,588
b. Total annual benefits ${ }^{1}$
c. Average annual benefit
\$ 18,055,036
\$ 17,742,173

Beneficiaries and spouses

| a. Number |  | 2,500 |  | 2,365 |
| :--- | :--- | ---: | ---: | ---: |
| b. | Total annual benefits ${ }^{1}$ | $\$$ | $39,282,025$ | $\$$ |
| c. | Average annual benefit | $\$$ | 15,713 | $\$$ |

[^1]
## Historical Summary of Active Member Data

|  | Active Members |  | Covered Payroll |  | Average Salary |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation as of June 30, | Number | Percent <br> Increase | Amount in \$ Millions | Percent <br> Increase | \$ Amount | Percent <br> Increase | Average <br> Age | Average Service |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 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 |
| 2012 | 87,778 | -0.3\% | 3,925 | 4.0\% | 44,713 | 4.4\% | 46.2 | 11.6 |

## Plan Net Assets <br> (Assets at Market or Fair Value)

| Item | Valuation as of |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | June 30, 2012 |  | June 30, 2011 |  |
| (1) |  | (2) |  | (3) |
| 1. Cash and cash equivalents | \$ | 24,936,734 | \$ | 14,348,481 |
| 2. Receivables |  |  |  |  |
| a. Employer and member contributions | \$ | 57,745,598 | \$ | 56,587,607 |
| b. State contribution |  | 29,333,331 |  | 27,322,221 |
| c. Net investment income and other accruals |  | 43,659,356 |  | 45,636,139 |
| d. Total receivables | \$ | 130,738,285 | \$ | 129,545,967 |

3. Investments
a. Invested cash and other
b. Equities
c. Fixed income
d. Real estate, furniture \& equipment
e. Total investments
4. Total assets
5. Liabilities
a. Benefits payable, including insurance payments
b. Net due to brokers
c. Other liabilities
d. Total liabilities
6. Net assets available (Item 4 - Item 5)

| \$ | 3,906,006 | \$ | 80,477,110 |
| :---: | :---: | :---: | :---: |
|  | 154,520,468 |  | 23,360,148 |
|  | 9,005,881 |  | 10,202,235 |
| \$ | 167,432,355 | \$ | 114,039,493 |
| \$ | 0,194,735,564 | \$ | ,156,357,170 |

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

|  | Valuation as of |  |
| :---: | :---: | :---: | :---: |
|  | $\frac{\text { June 30, 2012 }}{(1)} \quad \frac{\text { June 30, 2011 }}{(3)}$ |  |


| a. | Invested cash and other | $2.7 \%$ | $3.6 \%$ |
| ---: | :--- | ---: | ---: |
| b. | Equities | $67.4 \%$ | $65.1 \%$ |
| c. | Fixed income | $29.9 \%$ | $31.3 \%$ |
| d. | Real estate, furniture \& equipment | $0.0 \%$ | $0.0 \%$ |
|  | Total investments | $100.0 \%$ | $100.0 \%$ |

## Reconciliation of Plan Net Assets

$\frac{\text { Year Ending }}{\frac{\text { June 30, } 2012}{(1)} \frac{\text { June 30, } 2011}{(2)}}$

1. Market value of assets at beginning of year, net of Deposit Fund
a. Value reported in prior valuation
b. Prior period adjustments
c. Revised value
2. Revenue for the year

## a. Contributions

i. Member contributions, including state credit
ii. Grant matching funds
iii. State contribution
iv. Employer/district contributions
v. Total

| \$ | $291,385,506$ |  | $\$$ | $286,643,244$ |
| :--- | ---: | :--- | :--- | ---: |
|  | $23,188,952$ |  | $23,128,795$ |  |
|  | $281,806,711$ |  | $251,322,410$ |  |
|  | $376,635,234$ |  | $364,025,589$ |  |
|  |  | $973,016,403$ |  | $\$$ |
|  |  | $925,120,038$ |  |  |

b. Net investment earnings
i. Interest, dividends and other income
ii. Net appreciation/(depreciation)
iii. Less: investment expenses
iv. Net investment earnings
c. Total revenue

$$
\begin{aligned}
& \text { \$ 317,343,332 \$ 288,860,894 } \\
& (144,717,179) \quad 1,645,516,997 \\
& \begin{array}{llll} 
& (34,781,988) \\
& & & (45,846,053) \\
& & 137,844,165 & \\
\hline
\end{array} \\
& \text { \$ 1,110,860,568 \$ 2,813,651,876 }
\end{aligned}
$$

3. Expenditures for the year
a. Refunds

| $32,076,398$ |  | $\$$ |
| ---: | :---: | ---: |
| $1,036,132,587$ |  | $35,211,171$ |
| $4,273,189$ |  | $969,310,597$ |
|  |  | $4,739,280$ |
| $1,072,482,174$ |  | $1,009,261,048$ |

4. Increase in net assets (Item 2 - Item 3)
\$ 38,378,394 \$ 1,804,390,828
5. Market value of assets at end of year, net of Deposit Fund (Item $1+$ Item 4)
\$ 10,194,735,564
\$ 10,156,357,170

## Development of Actuarial Value of Assets

Year Ending<br>June 30, 2012

1. Market value of assets at beginning of year
2. Net new investments
a. Contributions
b. Benefits paid
c. Refunds
d. Subtotal
3. Market value of assets at end of year
4. Net earnings (3-1-2)
5. Assumed investment return rate
6. Expected return
7. Excess return (4-6)
8. Excess return on assets for last four years :

Period End
(1)
a. June 30, 2009
b. June 30, 2010
c. June 30, 2011
d. June 30, 2012

Excess Return
(2)
$(2,095,931,855)$
580,645,694
1,218,811,320
$(675,129,894)$
9. Actuarial value of assets (Item 3 - Item 8)
10. Actuarial value as percentage of market value
\$ 10,156,357,170
\$ 973,016,403 $(1,036,132,587)$
$(32,076,398)$
$(95,192,582)$
\$ 10,194,735,564
\$ 133,570,976
8.00\%
\$ 808,700,870
\$ $(675,129,894)$

Percent Deferred
(3)

20\%
40\%
60\%
80\%
\$ 10,190,480,780
100.0\%

## Estimation of Yields

A. Market value yield

1. Beginning of year market assets
2. Net investment income (including realized and
unrealized gains and losses)
\$ 10,156,357,170
\$ 8,351,966,342
3. Beginning of year market assets
4. Net investment income (including realized and
unrealized gains and losses)
5. Beginning of year market assets
6. Net investment income (including realized and
unrealized gains and losses)
7. End of year market assets
8. Estimated dollar weighted market value yield
\$ 10,194,735,564 \$ 10,156,357,170
\$ 133,570,976 \$ 1,888,531,838
$\frac{\text { Year Ending }}{\substack{\text { June 30, } 2012} \frac{\text { June 30, } 2011}{(1)} \text { (2) }}$
. Actuarial value yield
9. Beginning of year actuarial assets $\quad \$ \quad 9,960,576,151 \quad \$ \quad 9,566,683,405$
10. Actuarial return
11. End of year actuarial assets
$\$ 10,190,480,780 \quad \$ \quad 9,960,576,151$
12. Estimated actuarial value yield
3.3\%
5.0\%

## History of Investment Return Rates



## Average Returns

| Last Five Years: | $2.3 \%$ | $4.2 \%$ |
| ---: | :--- | :--- |
| Last Ten Years: | $7.2 \%$ | $5.5 \%$ |
| Last Fifteen Years: | $7.0 \%$ | $7.9 \%$ |
| Last Twenty Years: | $8.5 \%$ | $8.7 \%$ |

## History of Cash Flow



[^2]
## Investment Experience Gain or Loss

| Item | Year Ending June 30, 2012 | Year Ending June 30, 2011 |
| :---: | :---: | :---: |
| (1) | (2) | (3) |
| 1. Actuarial assets, beginning of year | \$ 9,960,576,151 | \$ 9,566,683,405 |
| 2. Contributions during year | \$ 973,016,403 | \$ 925,120,038 |
| 3. Benefits and refunds paid | \$ (1,068,208,985) | \$ (1,004,521,768) |
| 4. Assumed net investment income at $8 \%$ |  |  |
| a. Beginning of year assets | \$ 796,846,092 | \$ 765,334,672 |
| b. Contributions | 38,920,656 | 37,004,802 |
| c. Benefits and refunds paid | $(42,728,359)$ | $(40,180,871)$ |
| d. Total | \$ 793,038,389 | \$ 762,158,603 |
| 5. Expected actuarial assets, end of year (Sum of items 1 through 4) | \$ 10,658,421,958 | \$ 10,249,440,278 |
| 6. Actual actuarial assets, end of year | \$ 10,190,480,780 | \$ 9,960,576,151 |
| 7. Asset gain (loss) for year (Item 6 - Item 5) | \$ (467,941, 178 ) | \$ (288,864,127) |

## Total Experience Gain or Loss

| Item |  | Year Ending June 30, 2012 |  | Year Ending une 30, 2011 |
| :---: | :---: | :---: | :---: | :---: |
| (1) |  |  |  |  |
| A. Calculation of total actuarial gain or loss |  |  |  |  |
| 1. Unfunded actuarial accrued liability (UAAL), previous year | \$ | 7,600,178,301 |  | 0,413,957,187 |
| 2. Normal cost for the year (employer and employee) | \$ | 407,415,536 | \$ | 478,076,145 |
| 3. Less: total contributions for the year | \$ | $(973,016,403)$ | \$ | $(925,120,038)$ |
| 4. Interest at 8 \% |  |  |  |  |
| a. On UAAL | \$ | 608,014,264 | \$ | 833,116,575 |
| b. On normal cost |  | 16,296,621 |  | $19,123,046$ |
| c. On contributions |  | $(38,920,656)$ |  | $(37,004,802)$ |
| d. Total | \$ | 585,390,229 | \$ | 815,234,819 |
| 5. Expected UAAL (Sum of Items 1-4) | \$ | 7,619,967,663 |  | 0,782,148,113 |
| 6. Actual UAAL | \$ | 8,397,561,658 | \$ | 7,600,178,301 |
| 7. Total gain (loss) for the year (Item 5 - Item 6) | \$ | $(777,593,995)$ | \$ | 3,181,969,812 |
| B. Source of gains and losses |  |  |  |  |
| 8. Asset gain (loss) for the year | \$ | $(467,941,178)$ | \$ | $(288,864,127)$ |
| 9. Liability gain (loss) for the year |  | $(179,657,156)$ |  | 328,839,576 |
| 10. Ad hoc COLA granted different than assumed |  | 0 |  | 177,316,754 |
| 11. Impact of changes in actuarial assumptions and methods |  | 0 |  | 0 |
| 12. Impact of legislative changes |  | $(129,995,661)$ |  | 2,964,677,609 |
| 13. Total | \$ | $(777,593,995)$ | \$ | 3,181,969,812 |

Analysis of Change in Unfunded Actuarial Accrued Liability (UAAL)

| Basis | June 30, 2012 <br> UAAL <br> (in \$ Millions) | June 30, 2011 <br> UAAL <br> (in \$ Millions) |
| :---: | :---: | :---: |
| (1) | (2) | (3) |
| 1. From prior valuation | \$ 7,600.2 | \$ 10,414.0 |
| 2. Impact of changes, gains and losses |  |  |
| a. Expected increase based on expected contributions and passage of time | 65.2 | 383.3 |
| b. Liability (gain)/loss | 179.7 | (328.8) |
| c. Asset (gain)/loss | 467.9 | 288.9 |
| d. Impact of actual contributions (more)/less than expected under schedule | (45.4) | (15.2) |
| e. Ad hoc COLA granted different than assumed | 0.0 | (177.3) |
| f. Impact of changes in actuarial assumptions and methods | 0.0 | 0.0 |
| g. Legislative changes | 130.0 | $(2,964.7)$ |
| h. Total | 797.4 | $(2,813.8)$ |
| 3. Current UAAL ( $1+2 \mathrm{~h}$ ) | \$ 8,397.6 | \$ 7,600.2 |

## Analysis of Change in GASB ARC

| Basis | June 30, 2012 <br> GASB ARC <br> (Percent of Pay) | $\begin{gathered} \text { June 30, } 2011 \\ \text { GASB ARC } \\ \text { (Percent of Pay) } \end{gathered}$ |
| :---: | :---: | :---: |
| (1) | (2) | (3) |
| 1. Prior Valuation GASB 25 Contribution as a percentage of payroll | 14.87\% | 20.35\% |
| 2. Increases/(Decreases) due to: |  |  |
| a. Ad hoc COLA granted different than assumed | 0.00\% | -0.27\% |
| b. Impact of changes in actuarial assumptions and methods | 0.00\% | 0.00\% |
| c. Legislative changes | -0.30\% | -6.04\% |
| d. Asset (gain)/loss | 0.68\% | 0.44\% |
| e. All other plan experience: liability (gain) or loss, differences between actual and expected payroll, differences between actual and expected contributions, etc. | -0.19\% | 0.39\% |
| f. Total | 0.19\% | -5.48\% |
| 3. Current GASB 25 Contribution as a percentage of payroll | 15.06\% | 14.87\% |

## Projection of UAAL

| Valuation Date | UAAL <br> (1) Millions) |  |
| :---: | :---: | :---: |
|  | $(2)$ |  |
| June 30, 2012 | $\$$ | $8,397.6$ |
| June 30, 2013 | $8,647.4$ |  |
| June 30, 2014 | $8,462.4$ |  |
| June 30, 2015 | $8,374.0$ |  |
| June 30, 2016 | $8,507.5$ |  |
|  |  |  |
| June 30, 2017 | $8,481.1$ |  |
| June 30, 2018 | $8,426.7$ |  |
| June 30, 2019 | $8,341.0$ |  |
| June 30, 2020 | $8,220.0$ |  |
| June 30, 2021 | $8,059.5$ |  |
|  |  | $7,854.8$ |
| June 30, 2022 | $7,601.2$ |  |
| June 30, 2023 | $7,293.1$ |  |
| June 30, 2024 | $6,924.8$ |  |
| June 30, 2025 | $6,490.0$ |  |
| June 30, 2026 |  |  |
| June 30, 2027 | $5,982.1$ |  |
| June 30, 2028 | $5,393.7$ |  |
| June 30, 2029 | $4,716.9$ |  |
| June 30, 2030 | $3,942.7$ |  |
| June 30, 2031 | $3,061.6$ |  |
| June 30, 2032 |  |  |
| June 30, 2033 | $2,063.1$ |  |
| June 30, 2034 | 935.6 |  |
|  | $(333.6)$ |  |

## Solvency Test

## Actuarial Accrued Liability and Percent of Active Member Payroll for:

|  | Accumulated Member Contributions Including Interest |  | Retirees and Beneficiaries Currently Receiving Benefits |  | Terminated <br> Employees Not Yet <br> Receiving Benefits |  |  | Employer Financed <br> Portion of Vested and Nonvested Benefits |  |  | Actuarial Value of Assets |  | Portion of Accrued Liabilities $\qquad$ <br> Covered by Assets |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30, | (1) | \% of Payroll | (2) | \% of Payroll |  | (3) | \% of Payroll |  | (4) | \% of Payroll |  |  | (1) | (2) | (3) | (4) |
| 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\% |
| 2012 | 5,087.4 | 130\% | 9,814.2 | 250\% |  | 443.8 | 11\% |  | 3,242.6 | 83\% |  | 10,190.5 | 100\% | 52\% | 0\% | 0\% |

[^3]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 | Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. Avg. Comp. |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 25 | 283 | 843 | 205 | 46 | 22 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1,410 |
|  | \$29,716 | \$28,922 | \$30,199 | \$21,313 | \$26,132 | \$26,568 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$28,957 |
| 25-29 | 364 | 1,648 | 1,192 | 1,267 | 1,049 | 1,259 | 1 | 0 | 0 | 0 | 0 | 0 | 6,780 |
|  | \$31,076 | \$29,880 | \$34,422 | \$35,918 | \$36,644 | \$37,152 | \$37,100 | \$0 | \$0 | \$0 | \$0 | \$0 | \$34,269 |
| 30-34 | 261 | 988 | 672 | 783 | 858 | 4,363 | 653 | 2 | 0 | 0 | 0 | 0 | 8,580 |
|  | \$30,883 | \$28,094 | \$34,795 | \$36,657 | \$37,408 | \$40,110 | \$43,321 | \$31,043 | \$0 | \$0 | \$0 | \$0 | \$37,686 |
| 35-39 | 199 | 866 | 615 | 670 | 764 | 3,076 | 3,091 | 532 | 2 | 0 | 0 | 0 | 9,815 |
|  | \$30,289 | \$26,115 | \$33,712 | \$35,924 | \$37,067 | \$41,604 | \$46,823 | \$50,621 | \$29,622 | \$0 | \$0 | \$0 | \$40,902 |
| 40-44 | 182 | 819 | 587 | 698 | 714 | 3,031 | 2,650 | 2,519 | 720 | 3 | 0 | 0 | 11,923 |
|  | \$29,128 | \$26,103 | \$34,416 | \$35,393 | \$34,373 | \$40,666 | \$49,336 | \$52,300 | \$53,601 | \$46,691 | \$0 | \$0 | \$43,664 |
| 45-49 | 166 | 619 | 442 | 556 | 562 | 2,568 | 2,321 | 1,734 | 2,308 | 559 | 3 | 0 | 11,838 |
|  | \$29,306 | \$25,126 | \$32,017 | \$33,284 | \$34,897 | \$38,459 | \$48,602 | \$54,635 | \$55,182 | \$57,896 | \$43,843 | \$0 | \$45,519 |
| 50-54 | 163 | 581 | 436 | 469 | 547 | 2,438 | 2,332 | 1,913 | 2,012 | 1,855 | 721 | 2 | 13,469 |
|  | \$32,043 | \$27,094 | \$34,139 | \$32,586 | \$36,381 | \$37,794 | \$47,308 | \$50,535 | \$56,278 | \$58,709 | \$60,171 | \$50,464 | \$47,204 |
| 55-59 | 145 | 455 | 300 | 338 | 418 | 1,854 | 1,976 | 1,761 | 2,015 | 1,194 | 1,508 | 461 | 12,425 |
|  | \$32,489 | \$26,852 | \$33,192 | \$35,375 | \$34,189 | \$39,612 | \$46,062 | \$51,204 | \$55,134 | \$62,496 | \$64,129 | \$66,102 | \$49,953 |
| 60-64 | 64 | 235 | 186 | 228 | 278 | 1,211 | 1,199 | 1,135 | 1,272 | 846 | 701 | 848 | 8,203 |
|  | \$29,526 | \$24,071 | \$32,849 | \$31,702 | \$34,505 | \$39,358 | \$49,597 | \$50,753 | \$54,799 | \$61,959 | \$73,170 | \$70,905 | \$52,268 |
| 65 \& Over | 26 | 127 | 83 | 97 | 109 | 588 | 457 | 394 | 466 | 333 | 240 | 415 | 3,335 |
|  | \$21,502 | \$19,667 | \$23,690 | \$27,016 | \$32,104 | \$34,359 | \$46,906 | \$55,208 | \$56,564 | \$67,054 | \$79,061 | \$96,413 | \$54,635 |
| Total | 1,853 | 7,181 | 4,718 | 5,152 | 5,321 | 20,399 | 14,680 | 9,990 | 8,795 | 4,790 | 3,173 | 1,726 | 87,778 |
|  | \$30,414 | \$27,439 | \$33,618 | \$34,852 | \$35,871 | \$39,488 | \$47,605 | \$52,019 | \$55,304 | \$60,705 | \$66,337 | \$75,731 | \$44,713 |

# Summary of Plan Provisions 

## 1. Effective Date: July 1, 1943.

2. Plan Year: Twelve-month period ending June 30th.
3. Administration: 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. Type of Plan: The System is a qualified governmental defined benefit retirement plan. For GASB purposes, it is a cost-sharing multiple-employer PERS.
5. Eligibility: 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. Maximum Pay: 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 <br> $\$ 40,000$ Maximum | Elected <br> $\$ 25,000$ Maximum |
| :--- | :---: | :---: |
|  | $\$ 44,000$ | $\$ 27,500$ |
| $1996 / 1997$ | 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 EESIPthe 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 <br> 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 grant matching contribution) is required. The matching 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 <br> 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 | $6.50 \%$ |
| FY 2012 | $7.00 \%$ |
| FY 2013 | $8.00 \%$ |

9. Service: Employees receive credit for a year of service if they are contributing members for at least six months within one school year. For service performed on or after July 1, 2013, fractional service will be awarded for less than full-time employment performed during the contract year. Fractional service credit will be added together and the resulting sum will be included in the retirement formula calculations

Credit may also be granted for service prior to the System's effective date, and nonclassified 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. As of August 1, 2012, if a member has less than 120 days of unused sick leave at termination, additional service credit for sick leave days shall be equal to the number of unused sick leave days divided by 120 days.
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 five 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 ". For members joining after October 31, 2011, the member must also be at least age 60.
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 is eligible to retire early if the member is at least age 55 and has credit for five or more years of service, or at any age after 30 years of service. For members joining after October 31, 2011, a member is eligible to retire early if the member is at least age 60 and has credit for five or more years of service.
b. Monthly Benefit: The normal retirement benefit (based on current years of service) multiplied by the applicable early retirement factor below.
c. Early Retirement Factor:

| Retirement Age | Actuarial Equivalent Factors for Members Joining before November 1, 2011 | Statutory Factors for Members Joining after October 31, 2011 |
| :---: | :---: | :---: |
| 65 or later | 1.000000 | 1.00 |
| 64 | 1.000000 | 0.93 |
| 63 | 1.000000 | 0.86 |
| 62 | 1.000000 | 0.80 |
| 61 | 0.907808 | 0.73 |
| 60 | 0.825271 | 0.65 |
| 59 | 0.751219 | N/A |
| 58 | 0.684644 | N/A |
| 57 | 0.624673 | N/A |
| 56 | 0.570554 | N/A |
| 55 | 0.521634 | N/A |
| 54 | 0.477344 | N/A |
| 53 | 0.437186 | N/A |
| 52 | 0.400720 | N/A |
| 51 | 0.367562 | N/A |
| 50 | 0.337374 | N/A |

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).

## 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 (age 65 for members joining after October 31, 2011), they may be reduced as for Early Retirement above.
c. Payment Form: 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 <br> Service | Percent of <br> Interest <br> 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 lumpsum 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 $\$ 195$ 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 <br> July 1 | Local Employer <br> Contribution Rate |
| :---: | :---: |
| $(1)$ | $(2)$ |
| 1990 | $1.0 \%$ |
| 1991 | $1.5 \%$ |
| 1992 | $2.0 \%$ |
| 1993 | $2.5 \%$ |

## 1991 Legislative Session

No legislation enacted with an actuarial impact to the System.

## 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 <br> the$\$ 25,000 ~ l i m i t ~ p r i o r ~ t o ~$ <br> June 30, 1995 | For all other <br> 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 nonclassified 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 nonclassified 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 legislation enacted with an actuarial impact to the System.

## 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 <br> Increase |
| :--- | :--- | :--- |
| 20 Years or more | Less than $\$ 1,500.00$ | $4.5 \%$ |
|  | $\$ 1,500.00$ to $\$ 2,500.00$ | $4.0 \%$ |
|  | Over $\$ 2,500.00$ | $3.5 \%$ |
|  | Less than $\$ 1,000.00$ | $4.0 \%$ |
|  | $\$ 1,000.00$ to $\$ 2,000.00$ | $3.5 \%$ |
|  | Greater than $\$ 2,000.00$ | $3.0 \%$ |
|  | 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 legislation enacted with an actuarial impact to the System.

## 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):

| Period: Employer Contribution Rates  <br>  EESIP <br> Employers Non-EESIP <br> Employers |  |  |
| :--- | :---: | :---: |
|  | $7.05 \%$ | $7.05 \%$ |
| $1 / 1 / 2007-6 / 30 / 2007$ | $7.60 \%$ | $7.05 \%$ |
| $7 / 1 / 2007-12 / 31 / 2007$ | $7.85 \%$ | $7.05 \%$ |
| $1 / 1 / 2008-6 / 30 / 2008$ | $8.35 \%$ | $7.55 \%$ |
| $7 / 1 / 2008-12 / 31 / 2008$ | $8.50 \%$ | $7.55 \%$ |
| $1 / 1 / 2009-6 / 30 / 2009$ | $9.00 \%$ | $8.05 \%$ |
| $7 / 1 / 2009-12 / 31 / 2009$ | $9.00 \%$ | $8.05 \%$ |
| $1 / 1 / 2010-6 / 30 / 2010$ | $9.50 \%$ | $8.55 \%$ |
| 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 legislation enacted with an actuarial impact to the System.

## 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.

## 2012 Legislative Session

No legislation enacted with an actuarial impact to the System.

## 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 number of years required to amortize the Unfunded Actuarial Accrued Liability (UAAL), or the funding period. 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, the first step is to determine the contribution rate (level as a percentage of pay) required to provide the benefits of the average new member, or the normal cost rate. The normal cost rate consists of two pieces: (i) the member's contribution rate, and (ii) the remaining portion of the normal cost rate which is the employer's 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 projecting the benefits for this group, all scheduled changes to provisions and member contribution rates are included. 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.

The UAAL 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 provided in excess of 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: (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, and (e) employer and State contributions will remain the same percentage of payroll as the current fiscal year.

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, net of expenses and 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 | Service-Related Component | Total Salary Increase Rate |
| :---: | :---: | :---: |
| (1) | (2) | (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. Future ad hoc cost-of-living increases: None.

## B. Demographic Assumptions

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 |  |  |
| :---: | :---: | :---: | :---: | :---: |

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

| Age | Expected Deaths per 100 Lives |  |
| :---: | :---: | :---: |
|  | 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:

| Age | Expected Disabilities Occurring per 100 Lives |  |
| :---: | :---: | :---: |
|  | Male <br> Members | Female <br> 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

| Age | Unreduced Retirement |  |  |  | Reduced Retirement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males |  | Females |  | Males | Females |
|  | Rule of 80 | Rule of 90 | Rule of 80 | Rule of 90 |  |  |
| 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 | 10.0 | 10.0 |
| 63 | 18.0 | 18.0 | 18.0 | 18.0 | 7.5 | 7.5 |
| 64 | 16.0 | 16.0 | 16.0 | 16.0 | 7.5 | 7.5 |
| 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 |  |  |
| $75 \text { and }$ | 100.0 | 100.0 | 100.0 | 100.0 |  |  |

The retirement assumption was further modified for members hired after November 1, 2011. Affected members who would have been assumed to retire prior to age 60 under the above schedule are assumed to retire when first eligible for an unreduced benefit.

## C. Other Assumptions

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 (age 65 if hired on or after November 1, 2011).
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.
12. Decrement timing: Decrements of all types are assumed to occur mid-year.

## V. Participant Data

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 date of birth, date of hire, gender, years of service, 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, gender, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Individual member contributions for the 12 months prior to the valuation date were used to determine the actual salary for plan members in the prior plan year. The valuation assumptions for salary increases were used to determine the projected salary for the current plan year. Annualized salary for new members is based on the salary for the same hypothetical group of new members described in Section II, above. Additionally, contributing members were assumed to accrue one additional year of service between the end of the prior employment year and the valuation date.

Additional 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.

# Schedule of Increases and Decreases of Benefit Recipients Periods Ended June 30 

|  | Added to Rolls |  | Removed from Rolls |  | Rolls-End of Year |  | \% Increase <br> in Annual <br> Allowances | Average <br> Annual <br> Allowances** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> Ended | No. | Annual Allowances* | No. | Annual <br> Allowances | No. | Annual <br> Allowances |  |  |
| 2003 | 2,630 | 57,537,594 | 1,082 | 10,798,222 | 38,059 | 569,959,953 | 8.9\% | 1,304 |
| 2004 | 2,616 | 49,732,316 | 1,082 | 12,334,953 | 39,593 | 607,357,316 | 6.6\% | 1,315 |
| 2005 | 2,346 | 62,318,530 | 1,060 | 8,518,211 | 40,879 | 661,157,635 | 8.9\% | 1,373 |
| 2006 | 2,060 | 32,777,192 | 1,157 | 7,344,953 | 41,782 | 686,589,874 | 3.8\% | 1,376 |
| 2007 | 2,696 | 48,762,552 | 972 | 8,907,437 | 43,506 | 726,444,989 | 5.8\% | 1,419 |
| 2008 | 2,807 | 46,858,028 | 1,075 | 8,758,271 | 45,238 | 764,544,746 | 5.2\% | 1,437 |
| 2009 | 2,593 | 77,839,485 | 1,035 | 7,161,393 | 46,796 | 835,222,838 | 9.2\% | 1,483 |
| 2010 | 2,906 | 47,150,133 | 946 | 7,952,632 | 48,756 | 874,420,339 | 4.7\% | 1,511 |
| 2011 | 2,960 | 71,573,599 | 814 | 6,358,676 | 50,902 | 939,635,263 | 7.5\% | 1,537 |
| 2012 | 3,003 | 59,122,021 | 1,189 | 10,098,394 | 52,716 | 988,658,890 | 5.2\% | 1,547 |

* Includes post-retirement increases for members who retired in previous years and changes occurring due to plan options which offer a continuing monthly benefit payment to beneficiaries.
** Does not include special annuitants


Oklahoma Teachers
Retirement System

## Statistical Section Summary

The Statistical Section presents several schedules that provide financial trends analysis of the Teachers' Retirement System of Oklahoma's overall financial health and additional analytical information on membership data and retirement benefits. The schedules beginning on page 140 through page 149 provide data depicting active membership, level of monthly benefits, years of service, and retirement options. The schedules on page 150 to page 154 provide financial data showing revenues and expenses. On page 155 and page 156 these schedules report the financial impact of retirees in the state of Oklahoma and the participating employers. The source of the information in these schedules is derived from internal information unless otherwise noted.

## Retired Members by Type of Benefit

Fiscal Year Ended J une 30, 2012

| Amount of Monthly | Number of Retired | Type of Retirement * |  |  |  |  |  | Option Selected \# |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit | Members | 1 | 2 | 3 | 4 | 5 | 6 | A | B | C | D | E | G |
| Under \$500 | 6,757 | 3,658 | 2,422 | 283 | 54 | 326 | 14 | 3,140 | 1,704 | 1,385 | 297 | 217 | 14 |
| \$501-\$1,000 | 8,849 | 5,788 | 1,728 | 611 | 61 | 661 | 0 | 3,766 | 2,131 | 1,988 | 761 | 203 | 0 |
| \$1,001-\$1,500 | 8,254 | 7,041 | 250 | 527 | 6 | 430 | 0 | 3,031 | 1,980 | 2,232 | 877 | 134 | 0 |
| \$1,501-\$2,000 | 12,659 | 11,948 | 19 | 482 | 1 | 209 | 0 | 3,966 | 3,412 | 3,705 | 1,335 | 241 | 0 |
| \$2,001-\$2,500 | 10,070 | 9,729 | 3 | 320 | 0 | 18 | 0 | 2,873 | 2,501 | 3,208 | 1,225 | 263 | 0 |
| \$2,501-\$3,000 | 3,485 | 3,365 | 0 | 118 | 0 | 2 | 0 | 1,041 | 779 | 1,127 | 475 | 63 | 0 |
| \$3,001-\$3,500 | 1,098 | 1,071 | 0 | 27 | 0 | 0 | 0 | 351 | 229 | 353 | 138 | 27 | 0 |
| \$3,501-\$4,000 | 377 | 367 | 0 | 10 | 0 | 0 | 0 | 129 | 57 | 135 | 50 | 6 | 0 |
| Over \$4,000 | 446 | 429 | 0 | 17 | 0 | 0 | 0 | 126 | 68 | 180 | 59 | 13 | 0 |
|  | Totals | 43,396 | 4,422 | 2,395 | 122 | 1,646 | 14 | 18,423 | 12,861 | 14,313 | 5,217 | 1,167 | 14 |

* Type of Retirement

Type 1 - Normal retirement for age and service
Type 2 - Early retirement
Type 3 - Beneficiary payment (Normal retirement)
Type 4 - Beneficiary payment (Early retirement)
Type 5 - Disability retirement
Type 6-Special annuitants

## \# Option Selected

Option A - The Maximum Retirement Plan - provides the greatest monthly lifetime benefit.
Option B - Retirement Option 1 - provides for a decreased rate of reduction of a member's account balance.
Option C - Retirement Option 2 - known as the $100 \%$ joint survivor annuity - provides for a reduced monthly benefit to the member for life. Upon the death of the Option D - Retirement Option 3 - known as the $50 \%$ joint survivor annuity - provides a similar benefit as Option 2; however, upon the death of the member, the

# Average Benefit Payments 

Fiscal Years Ended J une 30

|  | Years of Credited Service |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement Effective Date | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 | 40+ |

Period 7/1/2002 to 6/30/2003

| Average monthly benefit | $\$ 0$ | $\$ 478$ | $\$ 772$ | $\$ 1,249$ | $\$ 1,696$ | $\$ 2,065$ | $\$ 2,399$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 0$ | $\$ 26,853$ | $\$ 29,763$ | $\$ 34,707$ | $\$ 38,797$ | $\$ 40,775$ | $\$ 41,913$ |
| Number of retired members | 0 | 334 | 337 | 444 | 715 | 600 | 167 |

Period 7/1/2003 to 6/30/2004

| Average monthly benefit | $\$ 306$ | $\$ 490$ | $\$ 772$ | $\$ 1,239$ | $\$ 1,700$ | $\$ 2,010$ | $\$ 2,381$ | $\$ 2,796$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 28,628$ | $\$ 28,466$ | $\$ 30,699$ | $\$ 35,192$ | $\$ 38,860$ | $\$ 41,194$ | $\$ 42,436$ | $\$ 43,492$ |
| Number of retired members | 99 | 381 | 358 | 433 | 639 | 505 | 153 | 48 |

Period 7/1/2004 to 6/30/2005

| Average monthly benefit | $\$ 314$ | $\$ 502$ | $\$ 804$ | $\$ 1,228$ | $\$ 1,731$ | $\$ 2,035$ | $\$ 2,358$ | $\$ 2,915$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 31,394$ | $\$ 28,718$ | $\$ 31,363$ | $\$ 34,939$ | $\$ 40,015$ | $\$ 41,648$ | $\$ 43,218$ | $\$ 46,519$ |
| Number of retired members | 94 | 335 | 304 | 467 | 531 | 417 | 150 | 48 |

Period 7/1/2005 to 6/30/2006

| Average monthly benefit | $\$ 311$ | $\$ 545$ | $\$ 803$ | $\$ 1,204$ | $\$ 1,729$ | $\$ 2,008$ | $\$ 2,350$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 28,873$ | $\$ 30,160$ | $\$ 31,960$ | $\$ 34,350$ | $\$ 39,703$ | $\$ 42,053$ | $\$ 42,948$ |
| Number of retired members | 112 | 275 | 325 | 403 | 475 | 328 | 107 |

Period 7/1/2006 to 6/30/2007

| Average monthly benefit | $\$ 289$ | $\$ 548$ | $\$ 844$ | $\$ 1,319$ | $\$ 1,825$ | $\$ 2,025$ | $\$ 2,692$ | $\$ 3,033$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 27,920$ | $\$ 31,084$ | $\$ 33,123$ | $\$ 37,294$ | $\$ 41,634$ | $\$ 45,283$ | $\$ 48,400$ | $\$ 50,850$ |
| Number of retired members | 145 | 318 | 349 | 453 | 601 | 490 | 260 | 80 |

Period 7/1/2007 to 6/30/2008

| Average monthly benefit | $\$ 331$ | $\$ 558$ | $\$ 897$ | $\$ 1,294$ | $\$ 1,846$ | $\$ 2,243$ | $\$ 2,767$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 31,448$ | $\$ 32,300$ | $\$ 34,616$ | $\$ 36,877$ | $\$ 42,274$ | $\$ 46,606$ | $\$ 50,852$ |
| Number of retired members | 155 | 324 | 346 | 512 | 568 | 528 | 271 |

Period 7/1/2008 to 6/30/2009

| Average monthly benefit | $\$ 366$ | $\$ 610$ | $\$ 955$ | $\$ 1,360$ | $\$ 1,896$ | $\$ 2,319$ | $\$ 3,073$ | $\$ 3,839$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 35,522$ | $\$ 34,547$ | $\$ 36,411$ | $\$ 38,874$ | $\$ 44,043$ | $\$ 49,044$ | $\$ 55,906$ | $\$ 65,221$ |
| Number of retired members | 135 | 302 | 324 | 497 | 502 | 465 | 234 | 134 |

Period 7/1/2009 to 6/30/2010

| Average monthly benefit | $\$ 365$ | $\$ 613$ | $\$ 952$ | $\$ 1,365$ | $\$ 1,895$ | $\$ 2,319$ | $\$ 3,074$ | $\$ 3,850$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 35,555$ | $\$ 34,709$ | $\$ 36,329$ | $\$ 38,995$ | $\$ 44,020$ | $\$ 49,040$ | $\$ 55,956$ | $\$ 65,319$ |
| Number of retired members | 135 | 299 | 321 | 496 | 499 | 465 | 232 | 133 |

Period 7/1/2010 to 6/30/2011

| Average monthly benefit | $\$ 351$ | $\$ 673$ | $\$ 982$ | $\$ 1,508$ | $\$ 2,002$ | $\$ 2,413$ | $\$ 3,102$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 33,424$ | $\$ 37,258$ | $\$ 38,819$ | $\$ 42,812$ | $\$ 46,530$ | $\$ 50,721$ | $\$ 57,796$ |
| Number of retired members | 194 | 378 | 355 | 586 | 566 | 605 | 365 |

Period 7/1/2011 to 6/30/2012

| Average monthly benefit | $\$ 403$ | $\$ 677$ | $\$ 1,099$ | $\$ 1,541$ | $\$ 1,999$ | $\$ 2,503$ | $\$ 3,104$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average final average salary | $\$ 37,026$ | $\$ 37,449$ | $\$ 41,858$ | $\$ 44,030$ | $\$ 46,226$ | $\$ 52,604$ | $\$ 56,960$ |
| Number of retired members | 228 | 386 | 352 | 567 | 552 | 585 | 326 |

## Principal Participating Employers

|  | Fiscal Year 2012 |  |  | Fiscal Year 2003 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participating Employer | Covered Members | Rank | Percentage of Total System | Covered Members | Rank | Percentage of Total System |
| OKLAHOMA CITY PUBLIC SCHOOLS | 5,077 | 1 | 5.43\% | 5,163 | 1 | 5.82\% |
| OKLAHOMA STATE UNIVERSITY | 4,034 | 2 | 4.31\% | 4,020 | 2 | 4.53\% |
| TULSA PUBLIC SCHOOLS | 3,861 | 3 | 4.13\% | 3,913 | 3 | 4.41\% |
| MOORE PUBLIC SCHOOLS | 2,758 | 4 | 2.95\% | 1,981 | 7 | 2.23\% |
| UNIVERSITY OF OKLAHOMA | 2,633 | 5 | 2.82\% | 3,303 | 4 | 3.72\% |
| EDMOND PUBLIC SCHOOLS | 2,481 | 6 | 2.65\% | 2,063 | 6 | 2.32\% |
| OU HEALTH SCIENCES CENTER | 1,975 | 7 | 2.11\% | 2,403 | 5 | 2.71\% |
| PUTNAM CITY PUBLIC SCHOOLS | 1,726 | 8 | 1.85\% | 1,545 | 10 | 1.74\% |
| MID-DEL PUBLIC SCHOOLS | 1,713 | 9 | 1.83\% | 1,605 | 9 | 1.81\% |
| LAWTON PUBLIC SCHOOLS | 1,693 | 10 | 1.81\% | 1,634 | 8 | 1.84\% |
| * All Other | 65,542 |  | 70.10\% | 61,152 |  | 68.88\% |
| Total (607 Employers) | 93,493 |  |  | 88,782 |  |  |


| *In Fiscal Year 2012, "all other" consisted of: |  |  |
| :--- | ---: | ---: |
| Type | Participating | Members |
| School Districts | 515 | 50,051 |
| Higher Education | 23 | 9,781 |
| Career Technology | 28 | 4,065 |
| State Agencies | 24 | 1,467 |
| Other | 7 | 178 |
| Total | $\mathbf{5 9 7}$ | $\mathbf{6 5 , 5 4 2}$ |

## Schedule of Average Payment Amounts

|  | Regular <br> End Date <br>  |
| :--- | ---: |
| Annuitants |  |
| June 30, 1948 | $\$ 33$ |
| June 30, 1954 | $\$ 75$ |
| June 30, 1960 | $\$ 83$ |
| June 30, 1972 | $\$ 179$ |
| June 30, 1973 | $\$ 209$ |
| June 30, 1974 | $\$ 217$ |
| June 30, 1975 | $\$ 226$ |
| June 30, 1976 | $\$ 248$ |
| June 30, 1977 | $\$ 321$ |
| June 30, 1978 | $\$ 345$ |
| June 30, 1979 | $\$ 365$ |
| June 30, 1980 | $\$ 382$ |
| June 30, 1981 | $\$ 432$ |
| June 30, 1982 | $\$ 480$ |
| June 30, 1983 | $\$ 592$ |
| June 30, 1984 | $\$ 600$ |
| June 30, 1985 | $\$ 600$ |
| June 30, 1986 | $\$ 761$ |
| June 30, 1987 | $\$ 837$ |
| June 30, 1988 | $\$ 907$ |
| June 30, 1989 | $\$ 949$ |


|  | Regular | Special |
| :---: | :---: | :---: |
| End Date | Annuitants | Annuitants |
| June 30, 1990 | \$956 | \$159 |
| June 30, 1991 | \$1,013 | \$159 |
| June 30, 1992 | \$1,021 | \$159 |
| June 30, 1993 | \$1,030 | \$159 |
| June 30, 1994 | \$1,044 | \$159 |
| June 30, 1995 | \$1,084 | \$163 |
| June 30, 1996 | \$1,093 | \$163 |
| June 30, 1997 | \$1,105 | \$163 |
| June 30, 1998 | \$1,119 | \$163 |
| June 30, 1999 | \$1,187 | \$172 |
| June 30, 2000 | \$1,199 | \$172 |
| June 30, 2001 | \$1,231 | \$175 |
| June 30, 2002 | \$1,246 | \$175 |
| June 30, 2003 | \$1,304 | \$175 |
| June 30, 2004 | \$1,304 | \$180 |
| June 30, 2005 | \$1,373 | \$187 |
| June 30, 2006 | \$1,376 | \$191 |
| June 30, 2007 | \$1,419 | \$191 |
| June 30, 2008 | \$1,437 | \$191 |
| June 30, 2009 | \$1,483 | \$194 |
| June 30, 2010 | \$1,511 | \$195 |
| June 30, 2011 | \$1,537 | \$195 |
| June 30, 2012 | \$1,547 | \$195 |



## Active Personnel

Fiscal Year Ended J une 30

| Years of Service | All Active Personnel | Classified Personnel | Unclassified Personnel |
| :---: | :---: | :---: | :---: |
| Under 5 years | 29,215 | 16,477 | 12,738 |
| 5-9 | 17,997 | 12,451 | 5,546 |
| 10-14 | 14,472 | 10,930 | 3,542 |
| 15-19 | 9,182 | 7,028 | 2,154 |
| 20-24 | 7,752 | 5,966 | 1,786 |
| 25-29 | 4,266 | 3,439 | 827 |
| 30-34 | 2,574 | 2,291 | 283 |
| 35-39 | 992 | 899 | 93 |
| 40-44 | 194 | 173 | 21 |
| 45-49 | 22 | 20 | 2 |
| 50-54 | 3 | 3 | 0 |
| 55-59 | 1 | 1 | 0 |
| Totals | 86,670 | 59,678 | 26,992 |
| Salary Range | All Active Personnel | Classified Personnel | Unclassified Personnel |
| Under \$5,000 | 1,605 | 399 | 1,206 |
| \$5,001-\$10,000 | 1,825 | 274 | 1,551 |
| \$10,001-\$15,000 | 5,120 | 403 | 4,717 |
| \$15,001-\$20,000 | 4,753 | 685 | 4,068 |
| \$20,001-\$25,000 | 3,638 | 626 | 3,012 |
| \$25,001-\$30,000 | 3,097 | 700 | 2,397 |
| \$30,001-\$35,000 | 7,206 | 4,867 | 2,339 |
| \$35,001-\$40,000 | 14,949 | 12,738 | 2,211 |
| \$40,001-\$45,000 | 13,491 | 11,897 | 1,594 |
| \$45,001-\$50,000 | 8,769 | 7,702 | 1,067 |
| \$50,001-\$55,000 | 5,576 | 4,848 | 728 |
| \$55,001-\$60,000 | 3,663 | 3,199 | 464 |
| \$60,001-\$65,000 | 2,602 | 2,239 | 363 |
| \$65,001-\$70,000 | 2,023 | 1,738 | 285 |
| \$70,001-\$75,000 | 1,620 | 1,375 | 245 |
| \$75,001 and Above | 6,733 | 5,988 | 745 |
| Totals | 86,670 | 59,678 | 26,992 |
| Average Age (years) | 45.9 | 45.1 | 47.7 |
| Average Salary | \$43,170.88 | \$50,165.12 | \$27,706.96 |
| Average Service (years) | 10.5 | 11.7 | 7.7 |

## Schedule of Retired Members by Type of Benefits Selected Plan Options Fiscal Year Ended June 30, 2012

| Option | Retired Members |  |  | Average Monthly Payment | \% of Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | Male | Female | Total |  |  |
| Maximum | 3,206 | 13,700 | 16,906 | \$1,451 | 32\% |
| Option 1 | 2,987 | 9,874 | 12,861 | \$1,523 | 25\% |
| Option 2 | 6,748 | 5,674 | 12,422 | \$1,709 | 24\% |
| Option 3 | 1,987 | 2,606 | 4,593 | \$1,857 | 9\% |
| Option 4 | 344 | 785 | 1,129 | \$1,489 | 2\% |
| Options 5, 6 \& 7 | 2,038 | 479 | 2,517 | \$1,388 | 5\% |
| Disability | 430 | 1,219 | 1,649 | \$932 | 3\% |
| Totals | 17,740 | 34,337 | 52,077 | \$1,547 | 100\% |


| Plan Options |  |
| :---: | :---: |
| Opt. 4 | $\begin{aligned} & \text { Opt. 5, } 6 \& 7 \\ & 5 \% \end{aligned}$ |
| Opt. 3 9\% | Disability $3 \%$ |
| Opt. 2 24\% |  |
| $\begin{array}{r} \text { Opt. } 1 \\ 25 \% \end{array}$ | $\begin{aligned} & \text { Max. } \\ & 32 \% \end{aligned}$ |

Maximum - provides for the greatest possible benefit.
Option 1 - provides for a decreased rate of reduction of member's account balance.
Option 2 - provides for a reduced monthly benefit to the member for life. Upon death of the member, the designated beneficiary will continue to receive the same monthly benefit for life.

Option 3 - provides a similar benefit as Option 2; however, upon death of the member, the monthly benefit to the designated beneficiary is one-half of the benefit of the member.

Option 4 - provides a reduced monthly benefit. In the event of the member's death within 120 months from the date of retirement, the balance of the payments are continued to the beneficiary designated at the time of retirement.
Options 5, $6 \& 7$ - represents beneficiaries of options $2,3 \& 4$.

Disability - upon meeting requirements, a vested member may receive a monthly benefit.

# Distribution by Years of Service Fiscal Year Ended June 30, 2012 

| Years of Creditable Service |  |  |  | Average |
| :---: | :---: | :---: | :---: | :---: |
|  | Retired Members |  |  | Monthly |
|  | Male | Female | Total | Payment |
| Under 10 | 477 | 769 | 1,246 | \$350 |
| 10-14 | 1,879 | 4,479 | 6,358 | \$493 |
| 15-19 | 1,869 | 4,484 | 6,353 | \$799 |
| 20-24 | 2,252 | 7,199 | 9,451 | \$1,268 |
| 25-29 | 3,938 | 8,645 | 12,583 | \$1,760 |
| 30-34 | 4,189 | 6,114 | 10,303 | \$2,147 |
| 35-39 | 2,128 | 2,008 | 4,136 | \$2,559 |
| 40-44 | 874 | 579 | 1,453 | \$3,020 |
| 45-49 | 116 | 54 | 170 | \$3,591 |
| 50 and Over | 18 | 6 | 24 | \$4,011 |
| Totals | 17,740 | 34,337 | 52,077 | \$1,547 |



## Distribution by Age at Retirement Fiscal Year Ended June 30, 2012

|  |  |  |  |  | Average |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average | Length of |
| Age at | Reti | red Memb | ers | Monthly | Service |
| Retirement | Male | Female | Total | Payment | (Years) |
|  | 1 | 0 | 1 | \$731 | 32.0 |
| 40 and Under | 17 | 54 | 71 | \$690 | 13.1 |
| 41-45 | 27 | 95 | 122 | \$914 | 15.9 |
| 46-50 | 121 | 317 | 438 | \$1,203 | 20.1 |
| 51-55 | 4,143 | 5,988 | 10,131 | \$1,917 | 28.5 |
| 56-60 | 5,115 | 11,479 | 16,594 | \$1,560 | 25.2 |
| 61-65 | 6,014 | 12,723 | 18,737 | \$1,391 | 23.1 |
| 66-70 | 1,909 | 3,113 | 5,022 | \$1,441 | 22.9 |
| 71-75 | 319 | 451 | 770 | \$1,377 | 22.8 |
| 76-80 | 56 | 95 | 151 | \$1,230 | 22.7 |
| Over 80 | 18 | 22 | 40 | \$973 | 21.4 |
| Totals | 17,740 | 34,337 | 52,077 | \$1,547 | 24.8 |



## Distribution by Retiree Age

Fiscal Year Ended June 30, 2012

| Age | Total Retired Members | Average Length of Service | Average Monthly Payment |
| :---: | :---: | :---: | :---: |
| Under 50 | 89 | 16.1 | \$998 |
| 50-54 | 525 | 25.6 | \$1,764 |
| 55-59 | 3,379 | 26.5 | \$1,829 |
| 60-64 | 9,345 | 25.6 | \$1,758 |
| 65-69 | 12,585 | 24.7 | \$1,665 |
| 70-74 | 9,758 | 24.1 | \$1,510 |
| 75-79 | 6,874 | 23.7 | \$1,366 |
| 80-84 | 4,781 | 24.1 | \$1,283 |
| 85-89 | 2,753 | 25.2 | \$1,243 |
| Over 90 | 1,906 | 26.5 | \$1,157 |
|  |  |  |  |
| Totals | 51,995 | 24.8 | \$1,548 |

Average Age of Retirees


## Distribution by Monthly Income <br> Fiscal Year Ended June 30, 2012

| Monthly <br> Income | Retired <br> Members | Total | Average <br> Payment |
| :--- | ---: | ---: | ---: |
| Under $\$ 100$ | 75 | $\$ 6,424$ | $\$ 86$ |
| $\$ 101-\$ 500$ | 6,678 | $\$ 2,192,004$ | $\$ 328$ |
| $\$ 501-\$ 1,000$ | 8,848 | $\$ 6,483,431$ | $\$ 733$ |
| $\$ 1,001-\$ 1,500$ | 8,262 | $\$ 10,498,032$ | $\$ 1,271$ |
| $\$ 1,501-\$ 2,000$ | 12,663 | $\$ 22,268,070$ | $\$ 1,759$ |
| $\$ 2,001-\$ 2,500$ | 10,065 | $\$ 22,268,438$ | $\$ 2,212$ |
| $\$ 2,501-\$ 3,000$ | 3,486 | $\$ 9,408,004$ | $\$ 2,699$ |
| $\$ 3,001-\$ 3,500$ | 1,098 | $\$ 3,520,142$ | $\$ 3,206$ |
| $\$ 3,501-\$ 4,000$ | 377 | $\$ 1,395,446$ | $\$ 3,701$ |
| Over $\$ 4,000$ | 443 | $\$ 2,423,877$ | $\$ 5,472$ |
| Totals | $\mathbf{5 1 , 9 9 5}$ | $\mathbf{\$ 8 0 , 4 6 3 , 8 6 9}$ | $\mathbf{\$ 1 , 5 4 8}$ |

Distribution by Monthly Income


# Teachers' Retirement System of Oklahoma Schedule of Cash Receipts and Disbursements Years Ended June 30, 2012 and 2011 401 (a) Plan 

|  |  | $\underline{2012}$ | $\underline{2011}$ |
| :---: | :---: | :---: | :---: |
| Cash balance, beginning of year | \$ | 14,348,481 | \$9,646,379 |
| Receipts: |  |  |  |
| Members' contributions |  | 291,385,506 | 285,394,448 |
| Member tax-shelter |  | - | - |
| Employer statutory requirement from local school districts |  | 376,635,234 | 365,828,308 |
| Matching funds |  | 23,188,952 | 23,164,641 |
| Dedicated revenue |  | 281,806,711 | 247,542,721 |
| Interest income |  | 154,664,641 | 171,091,974 |
| Dividends |  | 153,399,463 | 111,421,987 |
| Net gain (loss) on investments |  | 389,187,631 | 645,601,112 |
| Other revenue |  | 9,279,228 | 7,849,908 |
| * Investments sold |  | 182,980,166 | 9,083,942 |
| Total receipts |  | 1,862,527,532 | 1,866,979,041 |
| Disbursements: |  |  |  |
| Retirement, death, survivor, and health benefits |  | 1,036,132,586 | 914,910,028 |
| Refund of member contributions and annuity payments |  | 32,076,398 | 35,211,171 |
| Administrative expenses |  | 4,273,189 | 6,680,298 |
| Investment expenses |  | 34,781,988 | 31,780,384 |
| Equipment purchases |  | 725,236 | 762,842 |
| * Investment purchases |  | 743,949,882 | 872,932,216 |
| Total disbursements |  | 1,851,939,279 | 1,862,276,939 |
| Balance of cash, June 30 |  | \$24,936,734 | \$14,348,481 |

[^4]
## Schedule of Changes in Net Assets <br> For Periods Ended June 30

| Year |  | Additions |  |  |  | Deductions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Contri <br> Member | utions Employer | State and Federal Matching | Net Investment Income | Benefit Payments | Refunds and Annuity Payments | Administrative Expenses |
| 2003 | * | 224,952,145 | 218,841,977 | 143,147,463 | 266,036,160 | 608,976,125 | 73,563,552 | 4,007,846 |
| 2004 | * | 238,312,953 | 219,126,867 | 156,142,888 | 1,178,338,068 | 647,277,986 | 52,327,030 | 3,851,320 |
| 2005 | * | 241,459,049 | 227,791,719 | 177,966,919 | 691,956,300 | 701,715,390 | 44,060,265 | 4,212,266 |
| 2006 | * | 256,586,987 | 241,174,959 | 218,294,582 | 703,031,333 | 727,379,279 | 52,902,064 | 4,425,007 |
| 2007 | * | 294,291,782 | 271,012,403 | 264,904,170 | 1,474,628,856 | 767,212,709 | 57,378,925 | 4,549,159 |
| 2008 | * | 295,661,038 | 308,804,479 | 288,036,554 | $(722,427,217)$ | 806,540,725 | 63,925,592 | 4,791,118 |
| 2009 | * | 296,916,898 | 338,974,512 | 279,672,051 | $(1,452,047,400)$ | 876,273,193 | 75,692,946 | 5,216,493 |
| 2010 | * | 295,649,674 | 366,282,238 | 254,375,139 | 1,191,267,426 | 912,912,714 | 74,951,443 | 4,979,589 |
| 2011 | * | 291,654,100 | 364,025,589 | 274,451,205 | 1,925,637,239 | 979,245,846 | 58,920,565 | 4,716,480 |
| 2012 | * | \$ 291,385,506 | \$ 376,635,234 | \$ 304,995,663 | \$ 147,103,279 | \$ 1,036,132,586 | \$ 54,737,731 | \$ 4,273,189 |

*     - Net investment income includes both securities lending income and realized and unrealized gains and losses on investments.


## Schedule of Revenue by Source For Periods Ended J une 30

| Year |  | Member Contributions | Employer Contributions | State of Oklahoma and Various Grant Sources | Net <br> Investment Income | Other Revenue | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | * | 224,952,145 | 218,841,977 | 143,147,463 | 263,873,633 | 2,162,527 | 852,977,745 |
| 2004 |  | 238,312,953 | 219,126,867 | 156,142,888 | 1,175,826,812 | 2,511,256 | 1,791,920,776 |
| 2005 |  | 241,459,049 | 227,791,719 | 177,966,919 | 688,638,096 | 3,318,204 | 1,339,173,987 |
| 2006 |  | 256,586,987 | 241,174,959 | 218,294,582 | 699,048,530 | 3,982,803 | 1,419,087,861 |
| 2007 |  | 294,291,782 | 271,012,403 | 264,904,170 | 1,469,645,750 | 4,983,106 | 2,304,837,211 |
| 2008 | * | 295,661,038 | 308,804,479 | 288,036,554 | $(732,959,172)$ | 10,531,955 | 170,074,854 |
| 2009 |  | 296,916,898 | 338,974,512 | 279,672,051 | $(1,461,365,729)$ | 9,318,329 | $(536,483,939)$ |
| 2010 |  | 295,649,674 | 366,282,238 | 254,375,139 | 1,186,235,015 | 5,032,411 | 2,107,574,477 |
| 2011 |  | 291,654,100 | 364,025,589 | 274,451,205 | 1,919,301,220 | 6,336,019 | 2,855,768,133 |
| 2012 | * | \$ 294,833,537 | \$ 376,635,234 | \$ 304,995,663 | \$ 134,376,020 | \$9,279,228 | \$ 1,120,119,682 |

*     - Investment income includes both realized and unrealized gains and losses on investments.



# Schedule of Expenses by Type 

For Periods Ended June 30

| Year |  | Benefits |  | Refunds and Annuity Payments |  | dministrative <br> Expenses | Total Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 |  | 608,976,125 |  | 73,563,552 |  | 4,007,846 | 686,547,523 |
| 2004 |  | 647,277,986 |  | 52,327,030 |  | 3,851,320 | 703,456,336 |
| 2005 |  | 701,715,390 |  | 44,060,265 |  | 4,212,266 | 749,987,921 |
| 2006 |  | 727,379,279 |  | 52,902,064 |  | 4,425,007 | 784,706,350 |
| 2007 |  | 767,212,709 |  | 57,378,925 |  | 4,549,159 | 829,140,793 |
| 2008 |  | 806,540,725 |  | 63,925,592 |  | 4,791,118 | 875,257,435 |
| 2009 |  | 876,273,193 |  | 75,692,946 |  | 5,216,493 | 957,182,632 |
| 2010 |  | 912,912,714 |  | 74,951,443 |  | 4,979,589 | 992,843,746 |
| 2011 |  | 979,245,846 |  | 58,920,565 |  | 4,716,480 | 1,042,882,891 |
| 2012 | \$ | 1,036,132,586.00 | \$ | 54,737,731.00 | \$ | 4,273,189.00 | \$ 1,095,143,506.00 |




## Schedule of Benefit Expenses by Type For Periods Ended June 30





## Retirees in the State of Oklahoma by County

Of the 52,716 pensioners and beneficiaries in the Teachers' Retirement System of Oklahoma, $87 \%$ or 46,087 remain state of Oklahoma residents. As such, benefit payments of approximately $\$ 876,131,114$ this year alone went into the State's communities and businesses. Since money changes hands several times, the System's payments have a dramatic effect on the State's economy.

| County | Recipients | Annual Payment |
| :---: | :---: | :---: |
| Adair | 354 | \$6,805,707 |
| Alfalfa | 113 | \$2,202,543 |
| Atoka | 211 | \$3,873,114 |
| Beaver | 82 | \$1,514,877 |
| Beckham | 266 | \$5,039,944 |
| Blaine | 174 | \$3,433,797 |
| Bryan | 715 | \$13,637,111 |
| Caddo | 502 | \$8,584,745 |
| Canadian | 1,228 | \$23,042,793 |
| Carter | 643 | \$11,478,705 |
| Cherokee | 910 | \$18,402,728 |
| Choctaw | 226 | \$4,256,224 |
| Cimarron | 38 | \$716,123 |
| Cleveland | 2,888 | \$56,099,325 |
| Coal | 75 | \$1,364,612 |
| Comanche | 1,361 | \$26,463,023 |
| Cotton | 82 | \$1,376,703 |
| Craig | 199 | \$3,463,588 |
| Creek | 702 | \$13,347,249 |
| Custer | 502 | \$9,997,184 |
| Delaware | 396 | \$7,718,942 |
| Dewey | 112 | \$2,150,909 |
| Ellis | 60 | \$1,169,559 |
| Garfield | 689 | \$13,177,424 |
| Garvin | 399 | \$7,496,620 |
| Grady | 566 | \$10,334,198 |
| Grant | 77 | \$1,414,061 |
| Greer | 92 | \$1,762,626 |
| Harmon | 78 | \$1,421,702 |
| Harper | 76 | \$1,506,806 |
| Haskell | 223 | \$4,091,948 |
| Hughes | 184 | \$3,290,902 |
| J ackson | 376 | \$8,035,519 |
| J efferson | 73 | \$1,286,673 |
| J ohnston | 237 | \$4,460,602 |
| Kay | 577 | \$10,642,502 |
| Kingfisher | 198 | \$3,700,151 |
| Kiowa | 162 | \$2,843,113 |
| Latimer | 209 | \$3,453,729 |


| County | Recipients | Annual Payment |
| :---: | :---: | :---: |
| Lefore | 672 | \$12,548,132 |
| Lincoln | 386 | \$6,794,260 |
| Logan | 412 | \$6,907,770 |
| Love | 93 | \$1,530,047 |
| Major | 115 | \$1,985,575 |
| Marshall | 241 | \$4,573,102 |
| Mayes | 527 | \$10,289,304 |
| Mcclain | 508 | \$8,874,320 |
| Mccurtain | 553 | \$10,399,625 |
| Mcintosh | 387 | \$7,136,589 |
| Murray | 195 | \$3,722,255 |
| Muskogee | 1,120 | \$21,391,965 |
| Noble | 138 | \$2,376,607 |
| Nowata | 75 | \$1,286,304 |
| Okfuskee | 179 | \$3,039,544 |
| Oklahoma | 8,218 | \$156,448,520 |
| Okmulgee | 661 | \$11,970,528 |
| Osage | 183 | \$3,111,461 |
| Ottawa | 611 | \$10,572,466 |
| Pawnee | 172 | \$2,843,672 |
| Payne | 1,950 | \$37,561,487 |
| Pittsburg | 582 | \$10,512,110 |
| Pontotoc | 752 | \$14,503,646 |
| Pottawatomie | 783 | \$14,805,397 |
| Pushmataha | 179 | \$3,680,075 |
| Roger Mills | 75 | \$1,353,189 |
| Rogers | 863 | \$16,618,022 |
| Seminole | 339 | \$5,887,503 |
| Sequoyah | 575 | \$11,035,418 |
| Stephens | 557 | \$13,806,988 |
| Texas | 207 | \$3,791,940 |
| Tillman | 117 | \$2,207,804 |
| Tulsa | 6,025 | \$118,120,841 |
| Wagoner | 360 | \$7,007,565 |
| Washington | 600 | \$10,358,406 |
| Washita | 167 | \$3,196,769 |
| Woods | 239 | \$4,789,125 |
| Woodward | 216 | \$4,034,701 |
| Tota | 46,087 | \$876,131,114 |

## 2012 Participating Employers

| Public School Districts |  |  |  |
| :---: | :---: | :---: | :---: |
| ACHILLE | BOWLEGS | CLAYTON | ELGIN |
| ADA | BOWRING | CLEORA | ELK CITY |
| ADAIR | BRAGGS | CLEVELAND | ELMORE CITY |
| AFTON | BRAMAN | CLINTON | EMPIRE |
| AGRA | BRAY-DOYLE | COALGATE | ENID |
| ALBION | BRIDGE CREEK | COLBERT | ERICK |
| ALEX | BRIGGS | COLCORD | EUFAULA |
| ALINE CLEO | BRISTOW | COLEMAN | FAIRLAND |
| ALLEN | BROKEN ARROW | COLLINSVILLE | FAIRVIEW |
| ALLEN-BOWDEN | BROKEN BOW | COMANCHE | FANSHAWE |
| ALTUS | BRUSHY | COMMERCE | FARGO |
| ALVA | BUFFALO | COPAN | FARRIS |
| AMBER-POCASSET | BUFFALO VALLEY | CORDELL | FELT |
| ANADARKO | BURLINGTON | COTTONWOOD | FLETCHER |
| ANDERSON | BURNS FLAT-DILL CITY | COVINGTON-DOUG | FLOWER MOUND |
| ANTLERS | BUTNER | COWETA | FOREST GROVE |
| ARAPAHO-BUTLER | BYARS | COYLE | FORGAN |
| ARDMORE | BYNG | CRESCENT | FORT COBB-BROXTON |
| ARKOMA | CACHE | CROOKED OAK | FORT GIBSON |
| ARNETT | CADDO | CROWDER | FORT SUPPLY |
| ASHER | CALERA | CRUTCHO | FORT TOWSON |
| ATOKA | CALUMET | CUSHING | FOX |
| AVANT | CALVIN | CYRIL | FOYIL |
| BALKO | CAMERON | DAHLONEGAH | FREDERICK |
| BANNER | CANADIAN | DALE | FREEDOM |
| BARNSDALL | CANEY | DARLINGTON | FRIEND |
| BARTLESVILLE | CANEY VALLEY | DAVENPORT | FRINK-CHAMBERS |
| BATTIEST | CANTON | DAVIDSON | FRONTIER |
| BEARDEN | CANUTE | DAVIS | GAGE |
| BEAVER | CARNEGIE | DEER CREEK | GANS |
| BEGGS | CARNEY | DEER CREEK-LAMONT | GARBER |
| BELFONTE | CASHION | DENISON | GEARY |
| BENNINGTON | CATOOSA | DEPEW | GERONIMO |
| BERRYHILL | CAVE SPRINGS | DEWAR | GLENCOE |
| BETHANY | CEMENT | DEWEY | GLENPOOL |
| BETHEL | CENTRAL | DIBBLE | GLOVER |
| BIG PASTURE | CENTRAL HIGH | DICKSON | GOODWELL |
| BILLINGS | CHANDLER | DOVER | GORE |
| BINGER-ONEY | CHATTANOOGA | DRUMMOND | GRACEMONT |
| BISHOP | CHECOTAH | DRUMRIGHT | GRAHAM |
| BIXBY | CHELSEA | DUKE | GRAND VIEW |
| BLACKWELL | CHEROKEE | DUNCAN | GRANDFIELD |
| BLAIR | CHEYENNE | DURANT | GRANDVIEW |
| BLANCHARD | CHICKASHA | DUSTIN | GRANITE |
| BLUEJ ACKET | CHISHOLM | EAGLETOWN | GRANT |
| BOISE CITY | CHOCTAW/NICOMA PARK | EARLSBORO | GREASY |
| BOKOSHE | CHOUTEAU-MAZE | EDMOND | GREENVILLE |
| BOONE-APACHE | CIMARRON | EL RENO | GROVE |
| BOSWELL | CLAREMORE | ELDORADO | GROVE |


| Public School Districts (continued) |  |  |  |
| :---: | :---: | :---: | :---: |
| GUTHRIE | KINGFISHER | MIDDLEBERG | OSAGE HILLS |
| GUYMON | KINGSTON | MIDWAY | OWASSO |
| GYPSY | KINTA | MILBURN | PADEN |
| HAILEYVILLE | KIOWA | MILFAY | PANAMA |
| HAMMON | KONAWA | MILL CREEK | PANOLA |
| HANNA | KREBS | MILLWOOD | PAOLI |
| HARDESTY | KREMLIN-HILLSDALE | MINCO | PAULS VALLEY |
| HARMONY | LANE | MOFFETT | PAWHUSKA |
| HARRAH | LATTA | MONROE | PAWNEE |
| HARTSHORNE | LAVERNE | MOORE | PEAVINE |
| HASKELL | LAWTON | MOORELAND | PECKHAM |
| HAWORTH | LEACH | MORRIS | PEGGS |
| HAYWOOD | LEEDEY | MORRISON | PERKINS TRYON |
| HEALDTON | LEFLORE | MOSELEY | PERRY |
| HEAVENER | LEXINGTON | MOSS | PIEDMONT |
| HENNESSEY | LIBERTY | MOUNDS | PIONEER |
| HENRYETTA | LIBERTY | MOUNTAIN VIEW-GOTEBO | PIONEER-PLEASANT VALE |
| HILLDALE | LINDSAY | MOYERS | PITTSBURG |
| HINTON | LITTLE AXE | MULDROW | PLAINVIEW |
| HOBART | LOCUST GROVE | MULHALL-ORLANDO | PLEASANT GROVE |
| HODGEN | LOMEGA | MUSKOGEE | POCOLA |
| HOLDENVILLE | LONE GROVE | MUSTANG | PONCA CITY |
| HOLLIS | LONE STAR | NASHOBA | POND CREEK |
| HOLLY CREEK | LONE WOLF | NAVAJ O | PORTER CONSOLIDATED |
| HOMINY | LOOKEBA-SICKLES | NEW LIMA | PORUM |
| HOOKER | LOWREY | NEWCASTLE | POTEAU |
| HOWE | LUKFATA | NEWKIRK | PRAGUE |
| HUGO | LUTHER | NINNEKAH | PRESTON |
| HULBERT | MACOMB | NOBLE | PREITY WATER |
| HYDRO-EAKLY | MADILL | NORMAN | PRUE |
| IDABEL | MANGUM | NORTH ROCK CREEK | PRYOR |
| INDIAHOMA | MANNFORD | NORWOOD | PURCELL |
| INDIANOLA | MANNSVILLE | NOWATA | PUTNAM CITY |
| INOLA | MAPLE | OAK GROVE | QUAPAW |
| JAY | MARBLE CITY | OAKDALE | QUINTON |
| JENKS | MARIETTA | OAKS MISSION | RATTAN |
| J ENNI NGS | MARLOW | OILTON | RAVIA |
| J ONES | MARYEITA | OKARCHE | RED OAK |
| JUSTICE | MASON | OKAY | REYDON |
| JUSTUS-TIAWAH | MAUD | OKEENE | RINGLING |
| KANSAS | MAYSVILLE | OKEMAH | RINGWOOD |
| KELLYVILLE | MCALESTER | OKLAHOMA CITY | RIPLEY |
| KENWOOD | MCCORD | OKLAHOMA UNION | RIVERSIDE |
| KEOTA | MCCURTAIN | OKMULGEE | ROBIN HILL |
| KETCHUM | MCLOUD | OKTAHA | ROCK CREEK |
| KEYES | MEDFORD | OLIVE | ROCKY MOUNTAIN |
| KEYS | MEEKER | OLUSTEE | ROFF |
| KEYSTONE | MERRITT | OOLOGAH TALALA | ROLAND |
| KIEFER | MIAMI | OPTIMA | RUSH SPRINGS |
| KILDARE | MID-DEL | OSAGE | RYAL |


| Public School Districts (continued) |  |  |  |
| :---: | :---: | :---: | :---: |
| RYAN | TECUMSEH | WESTERN HEIGHTS | SOUTHERN OKLAHOMA |
| SALINA | TEMPLE | WESTVILLE | SOUTHWEST |
| SALLISAW | TENKILLER | WETUMKA | TRI COUNTY |
| SAND SPRINGS | TERRAL | WEWOKA | TULSA |
| SAPULPA | TEXHOMA | WHITE OAK | WES WATKINS |
| SASAKWA | THACKERVILLE | WHITE ROCK | WESTERN |
| SAVANNA | THOMAS-FAY-CUSTER UNIFIED | WHITEBEAD |  |
| SAYRE | TIMBERLAKE INDEPENDENT | WHITEFIELD | Colleges and Universities |
| SCHULTER | TIPTON | WHITESBORO | CAMERON UNIV |
| SEILING | TISHOMINGO | WICKLIFFE | CARL ALBERT STATE COLLEGE |
| SEMINOLE | TONKAWA | WILBURTON | CONNORS STATE COLLEGE |
| SENTINEL | TULSA | WILSON | EAST CENTRAL STATE |
| SEQUOYAH | TUPELO | WILSON | EASTERN OKLA STATE COLLEGE |
| SHADY GROVE | TURKEY FORD | WISTER | LANGSTON UNIV |
| SHADY POINT | TURNER | WOODALL | MURRAY STATE COLLEGE |
| SHARON MUTUAL | TURPIN | WOODLAND | N OKLA COLLEGE |
| SHATTUCK | TUSHKA | WOODWARD | NE OKLA A\&M COLLEGE |
| SHAWNEE | TUSKAHOMA | WRIGHT CITY | NE STATE UNIV |
| SHIDLER | TUTTLE | WYANDOTTE | NW OKLA STATE UNIV |
| SILO | TWIN HILLS | WYNNEWOOD | OKC COMMUNITY COLLEGE |
| SKELLY | TYRONE | WYNONA | OKLA PANHANDLE ST UNIV |
| SKIATOOK | UNION | YALE | OKLA STATE UNIV |
| SMITHVILLE | UNION CITY | YARBROUGH | OU HEALTH SCIENCES |
| SNYDER | VALLIANT | YUKON | REDLANDS COMM. COLLEGE |
| SOPER | VANOSS | ZANEIS | ROGERS STATE UNIV |
| SOUTH COFFEYVILLE | VARNUM | ZION | ROSE STATE COLLEGE |
| SOUTH ROCK CREEK | VELMA ALMA |  | SE OKLA STATE UNIV |
| SPAVINAW | VERDEN | Career and Technology Centers | SEMINOLE STATE COLLEGE |
| SPERRY | VERDIGRIS | AUTRY | SW OKLA STATE UNIV |
| SPIRO | VIAN | CADDO-KIOWA | TULSA COMMUNITY COLLEGE |
| SPRINGER | VICl | CANADIAN VALLEY | UNIV OF CENTRAL OKLA |
| STERLING | VINITA | CENTRAL OKLAHOMA | UNIV OF OKLA |
| STIDHAM | WAGONER | CHISHOLM TRAIL | UNIV OF SCIENCES \& ARTS |
| STIGLER | WAINWRIGHT | EASTERN OKLAHOMA CO | W OKLA STATE COLLEGE |
| STILLWATER | WALTERS | FRANCIS TUTTLE |  |
| STILWELL | WANETTE | GORDON COOPER | Other Entities |
| STONEWALL | WAPANUCKA | GREAT PLAINS | ATOKA/COAL INTERLOCAL |
| STRAIGHT | WARNER | GREEN COUNTRY | BOARD OF PRIVATE VOCATIONAL SCHOOLS |
| STRATFORD | WASHINGTON | HIGH PLAINS | BOARD OF REGENTS FOR HIGHER EDUCATION |
| STRINGTOWN | WATONGA | INDIAN CAPITOL | BOARD OF REGENTS OF OKLAHOMA COLLEGE |
| STROTHER | WATTS | KIAMICHI | CCOSA |
| STROUD | WAUKOMIS | MERIDIAN | CAREER TECH |
| STUART | WAURIKA | METRO TECH | CHEROKEE CTY INTERLOCAL COOP |
| SULPHUR | WAYNE | MID-AMERICA | CHOCTAW NATION INTERLOCAL COOP |
| SWEETWATER | WAYNOKA | MOORE-NORMAN | COMMISSION ON TEACHERS PREPARATION |
| SWINK | WEATHERFORD | NORTHEAST | DEBORAH BROWN |
| TAHLEQUAH | WEBBERS FALLS | NORTHWEST | DEPT OF CORRECTIONS |
| TALIHINA | WELCH | PIONEER | DEPT OF EDUCATION |
| TALOGA | WELEETKA | PONTOTOC | DEPT OF REHAB SERVICE |
| TANNEHILL | WELLSTON | RED RIVER SCHOOL | EPIC CHARTER |

FIVE STAR INTERLOCAL
HARDING CHARTER PREP
HARDING FINE ARTS CENTER
INDEPENDENCE CHRTER MIDDLE SCHOOL
KIPP REACH COLLEGE PREP
OKLAHOMA EDUCATION
ASSOCIATION
OKLAHOMA SCHOOL OF
SCIENCE \& MATH
OKLAHOMA STUDENT LOAN
AUTHORITY
OSAGE COUNTY INTERLOCAL COOP
QUARTZ MOUNTAIN
S E OKLA INTERLOCAL COOP
STREET SCHOOL
TEACHERS RETIREMENT SYSTEM
TRI-COUNTY INTERLOCAL CO-OP
TULSA SCHOOL OF ARTS \& SCIENCES
UNIVERSITY CENTER OF
SOUTHERN OKLA
WESTERN VILLAGE CHARTER SCHOOL


[^0]:    * Policy benchmark consists of 28\% S\&P 500, 15\% Russell Midcap, 10\% Russell 2000, 17\% MSCI EAFE, 30\% Lehman Aggregate

[^1]:    ${ }^{1}$ Benefit amounts exclude the supplemental medical insurance payment.

[^2]:    ${ }^{1}$ Column (7) $=$ Column (2) + Column (6).

[^3]:    Note : Dollar amounts in millions

[^4]:    * Includes equities, fixed income and short-term investments.

