OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT

AS OF JULY 1, 2013

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This report has been prepared by Buck Consultants for the Oklahoma Police Pension and Retirement System to:

- Present the results of a valuation of the Oklahoma Police Pension and Retirement System as of July 1, 2013;
- Review experience under the System for the year ended June 30, 2013; and
- Provide reporting and disclosure information for auditors' reports, governmental agencies and other interested parties.

The main financial highlights are:

- The funded status of the System decreased since the prior valuation as indicated by the table below.

GASB No. 25 Funded Status ($000,000)	July 1, 2013	July 1, 2012
Accrued Liability	$ 2,131.2	$ 2,034.5
Actuarial Value of Assets	$ 1,902.6	$ 1,834.2
Unfunded Accrued Liability	$ 228.6	$ 200.3
Funded Ratio	89.3%	90.2%

- The funded ratio on a ASC 960 basis, measuring the market value of System assets versus the present value of benefits accrued as of the valuation date, increased from 94.8% to 100.5%.
- The required state contribution for the System increased from $44.9 million to $54.1 million. Please note that the Unfunded Accrued Liability is amortized over 5 years at July 1, 2013 (the original period was 30 years from July 1, 1988). As this period continues to decrease, the Required State Contribution will become less stable.

Contribution Summary ($000,000)	July 1, 2013	July 1, 2012
Total Required Contribution	$ 112.4	$ 100.4
Expected Employee Contributions	22.2	21.1
Expected Municipality Contributions	36.1	34.4
Required State Contribution	$ 54.1	$ 44.9
--As a Percentage of Total Payroll	19.4%	16.9%

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or system provisions between the two valuations are described herein.

	Actuarial Valuation as of	
	July 1, 2013	**July 1, 2012**
Summary of Costs		
Required State Contribution for Current Year	$ 54,147,769	$ 44,891,731
Actual State Contribution Received in Prior Year [1]	$ 31,412,000	$ 28,092,000
GASB No. 25 Funded Status		
Actuarial Accrued Liability	$ 2,131,172,172	$ 2,034,485,171
Actuarial Value of Assets	$ 1,902,581,000	$ 1,834,170,000
Unfunded Actuarial Accrued Liability	$ 228,591,172	$ 200,315,171
Market Value of Assets and Additional Liabilities		
Market Value of Assets	$ 1,976,839,000	$ 1,784,760,000
Actuarial Present Value of Accumulated System Benefits (ASC 960)	$ 1,966,888,546	$ 1,882,317,166
Present Value of Projected System Benefits	$ 2,653,474,241	$ 2,551,090,081
Summary of Data		
Number of Members in Valuation		
Active Paid Members	4,467	4,441
Deferred Option Plan Members	27	37
Terminated Members with Refunds Due	729	660
Terminated Members with Deferred Benefits	118	126
Retired Members	2,441	2,368
Beneficiaries	659	642
Disabled Members	139	138
Total	**8,580**	**8,412**
Active Member Statistics		
Total Annual Compensation [2]	$ 276,920,177	$ 263,529,629
Average Compensation [2]	$ 61,992	$ 59,340
Average Age	39.8	39.6
Average Service	12.1	11.9

(1) For the fiscal years beginning July 1, 2009, the system receives 14% of the State's revenue from insurance premium taxes. For fiscal years beginning July 1, 2010, the amount of insurance premium tax apportioned to the System will be applied prior to the calculation of the Home Office Credit.

(2) Compensation is projected one year based on the salary increase assumptions.

Legislative Changes

There were no legislative changes with an actuarial impact as of July 1, 2013.

Changes in Assumptions and Methods

There were no changes to methods since the prior valuation. Changes to the following actuarial assumptions were approved by the Board since the prior valuation:

- Rates of retirement
- Rates of disability
- Rates of withdrawal
- Salary increase assumption
- Rates of mortality

These changes were made as a result of an experience study. The changes in assumptions resulted in a decrease in Actuarial Accrued Liability of about $2.4 million. See Section 4.2 for a description of the assumptions and methods used for the July 1, 2013 valuation.

Changes in Plan Provisions

There were no changes in plan provisions or system benefits with an actuarial impact as of July 1, 2013. See Section 4.3 for a description of the plan provisions used for the July 1, 2013 valuation.

Actuarial Experience During the Plan Year

The System experienced the following gains/(losses) during the year ending June 30, 2013. These amounts are developed in Section 1.4 of this report:

	Millions
Liability Gain/(Loss)	$ (7.2)
Asset Gain/(Loss)	$ (39.0)
Total Gain/(Loss)	$ (46.2)

The Oklahoma Police Deferred Option Plan (DOP) allows employees eligible for a Normal Retirement Benefit to defer the receipt of retirement benefits while continuing employment. Participation in the DOP is limited to five years. During this time, the members' contributions stop, but the employer contributes half of the regular contribution on base salary to the Police Pension and Retirement System and the other half to the members' account in the DOP. In addition, the monthly retirement benefits are paid into the members' account in the DOP. The DOP also allows members to retroactively elect to enter the DOP as of an earlier date upon termination. The monthly retirement benefits and employer contributions that would have been payable had the member elected to enter the DOP are credited to the member's account in the DOP.

The DOP accounts are credited with interest at a rate of 2% less than the total fund net earnings, with a guaranteed minimum interest rate equal to the valuation interest rate of 7.5%. The interest rate credited for the fiscal year ended June 30, 2013, was 10.34%.

Effective July 1, 2006, a retired member who has completed participation in the DOP is allowed to transfer their account balance into a Deferred Option Payout Account and no further contributions will be accepted. The accounts are credited with interest at a rate of 2% less than the total fund net earnings if the fund returns more than 2%. If the fund realizes negative returns, the accounts are reduced at a rate equal to the fund net earnings. Alternatively, if the fund realizes a positive return of less than 2%, the accounts are credited with a rate of zero. The interest rate for the payout accounts for the fiscal year ended June 30, 2013 was 10.34%.

The assets and liabilities reflected in these results as of July 1, 2013, include the account balances for the Deferred Option Plan, as in prior valuations. Statistics regarding the number of Deferred Option Plan members and total account balances are shown in the table below:

DOP Statistics	July 1, 2013	July 1, 2012
Number of Active DOP Members	27	37
Account Balances of Active Members	$ 4.7M	$ 4.2M
Annual Retirement Benefits of Active Members	$ 1.1M	$ 1.3M
Deferred Option Payout Account Balances	$ 3.0M	$ 2.6M
Total	$ 7.7M	$ 6.8M

GASB 67 and 68

Plan sponsors will be transitioning to new financial statement disclosure requirements which are set forth in GASB Statement 67 (for plans' financial statements) and GASB Statement 68 (for plan sponsors' financial statements) over the next two years. Some key requirements and implications are:

- A Net Pension Liability (NPL, equal to plan liability minus plan assets as defined by the new standards as described below) will be added to the balance sheet for all employers
- Assets will be reported at Fair Value (<u>not</u> Actuarial value)
- Liabilities will be based on the following methods and assumptions:
    - Individual Entry Age Normal cost method
    - A discount rate (used to discount expected future benefits) equal to the expected investment rate of return except for benefit payments not expected to be funded by assets on hand, which are to be discounted at a high quality 20-year tax-exempt municipal bond index rate
    - "Run-out date" cash projections must be used to determine the cross-over point between benefits expected to be covered by assets and those that must be discounted using the municipal bond index rates.

A key element of this change is that the NPL will reflect the Market Value funded position of the plan and will likely differ materially from the previously disclosed Net Pension Obligation, which represented the difference between the amounts contributed and the Actuarially Required Contribution (ARC) which represented the anticipated contribution. Moreover, plans which are less well funded may be subject to a discount rate modified by the Municipal Bond Rate Index, which would generally have the effect of increasing the NPL.

Actuarial Certification

This valuation is based on employee and financial data which were provided by the Oklahoma Police Pension and Retirement System and the independent auditor, respectively, and which are summarized in this report.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

We are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

David Kent, F.S.A., E.A., M.A.A.A.
Director, Retirement Actuary

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Director, Retirement Actuary

SUMMARY OF CONTRIBUTION REQUIREMENT

	Actuarial Valuation as of			
	July 1, 2013		July 1, 2012	
	Amount	% of Active Covered Comp.	Amount	% of Active Covered Comp.
1. Annual Covered Compensation for Members Included in Valuation				
a. Active Members	$276,920,177		$263,529,629	
b. Deferred Option Plan Members	2,093,345		2,508,730	
c. Total	$279,013,522		$266,038,359	
2. Total Normal Cost Mid-year	$ 54,994,819	19.9%	$ 56,159,687	21.3%
3. Unfunded Actuarial Accrued Liability	$228,591,172		$200,315,171	
4. Amortization of Unfunded Actuarial Accrued Liability over 30 years From July 1, 1988 at mid-year	$ 54,528,754	19.7%	$ 41,187,422	15.6%
5. Budgeted Expenses	$ 2,913,500	1.1%	$ 3,048,911	1.2%
6. Total Required Contribution *(2 + 4 + 5)*	$112,437,073	40.6%	$100,396,020	38.1%
7. Estimated Employee Contribution *(8% x 1a)*	$ 22,153,614	8.0%	$ 21,082,370	8.0%
8. Estimated Municipality Contributions				
a. Active Members	$ 35,999,623	13.0%	$ 34,258,852	13.0%
b. Deferred Option Plan Members	136,067	6.5%(1)	163,067	6.5%(1)
c. Total	$ 36,135,690	13.0%(2)	$ 34,421,919	12.9%(2)
9. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 1988 at mid-year. *(6 - 7 - 8c)*	$ 54,147,769	19.4%(2)	$ 44,891,731	16.9%(2)
10. Previous year's actual State Contribution(3)	$ 31,412,000	11.8%(4)	$ 28,092,000	10.9%(4)
11. Approximate period over which previous year's State Contribution will amortize current Unfunded Actuarial Accrued Liability (UAAL)	$ 9(5)		$ 10(5)	

(1) Percentage of Deferred Option Plan Members' covered compensation.

(2) Percent of total covered compensation.

(3) For the fiscal years beginning July 1, 2009, the system receives 14% of the State's revenue from insurance premium taxes. For fiscal years beginning July 1, 2010, the amount of insurance premium tax apportioned to the System will be applied prior to the calculation of the Home Office Credit.

(4) Shown as a percent of previous year's total covered compensation ($268,038,359 for 2012 and $257,504,567 for 2011).

(5) Amortization period assumes that the State contribution will increase at 3% per year and covered compensation for Deferred Option Plan members remains a constant percentage of total covered compensation.

LIABILITY DETAIL

	July 1, 2013
Present Value of Benefits	$ 2,653,474,241
Present Value of Future Normal Costs	$ 522,302,069
Accrued Liability	$ 2,131,172,172
Normal Cost Mid-Year	**$ 54,994,819**

Active Accrued Liability	
a. Retirement	$ 1,045,258,242
b. Disability	(220,128)
c. Withdrawal	481,216
d. Death	5,873,051
e. Total	$ 1,052,392,381
Inactive Accrued Liability	
1. Members Eligible for Automatic COLA	
a. Retired Members	$ 76,853,069
b. Disabled Members	11,114,134
c. Beneficiaries	68,332,254
d. Total	$ 156,299,457
2. Members Not Eligible for Automatic COLA	
a. Retired Members	$ 783,990,747
b. Disabled Members	14,608,365
c. Terminated Members	20,039,858
d. Deferred Option Plan Members	21,283,406
e. Beneficiaries	82,557,958
f. Total	$ 922,780,334
3. Total Inactive *(1d + 2f)*	$ 1,078,779,791
Accrued Liability (Active + Inactive)	**$ 2,131,172,172**

UNFUNDED ACTUARIAL ACCRUED LIABILITY

The actuarial accrued liability is the present value of projected system benefits allocated to past service by the actuarial funding method being used.

	Total System	
	July 1, 2013	**July 1, 2012**
1. Actuarial Present Value of Benefits		
a. Active Members	$ 1,574,694,450	$ 1,523,354,687
b. Terminated Members	20,039,858	21,409,764
c. Members Receiving Benefits who are not eligible for Automatic COLA	881,157,070	827,637,800
d. Members Receiving Benefits who are eligible for Automatic COLA	156,299,457	155,869,461
e. Deferred Option Plan Members	21,283,406	22,818,369
f. Total	$ 2,653,474,241	$ 2,551,090,081
2. Actuarial Present Value of Future Normal Costs	522,302,069	516,604,910
3. Total Actuarial Accrued Liability *(1f - 2)*	2,131,172,172	2,034,485,171
4. Actuarial Value of Assets	1,902,581,000	1,834,170,000
5. Unfunded Actuarial Accrued Liability *(3 - 4, not less than $0)*	**$ 228,591,172**	**$ 200,315,171**

ACTUARIAL GAIN/(LOSS)

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of July 1, 2013.

1. Expected Actuarial Accrued Liability	
a. Actuarial Accrued Liability at July 1, 2012	$ 2,034,485,171
b. Normal Cost for Plan Year Ending June 30, 2013	56,159,687
c. Benefit Payments for Plan Year Ending June 30, 2013	114,617,000
d. Interest on a + b - c to End of Year	150,394,239
e. Expected Actuarial Accrued Liability Before Changes *(a + b - c + d)*	2,126,422,097
f. Change in Actuarial Accrued Liability at July 1, 2013 due to changes in Actuarial Assumptions	(2,444,113)
g. Change in Actuarial Accrued Liability at July 1, 2013 due to changes in System Provisions	0
h. Expected Actuarial Accrued Liability at July 1, 2013 *(e + f + g)*	$ 2,123,977,984
2. Actuarial Accrued Liability at July 1, 2013	$ 2,131,172,172
3. Actuarial Liability Gain/(Loss) *(1h – 2)*	**$ (7,194,188)**
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at July 1, 2012	$ 1,834,170,000
b. Contributions Made for Plan Year Ending June 30, 2013	87,575,000
c. Benefit Payments and Expenses for Plan Year Ending June 30, 2013	116,670,000
d. Interest on a + b - c to End of Year	136,471,688
e. Expected Actuarial Value of Assets at July 1, 2013 *(a + b - c + d)*	$ 1,941,546,688
5. Actuarial Value of Assets as of July 1, 2013	$ 1,902,581,000
6. Actuarial Asset Gain/(Loss) *(5 - 4e)*	**$ (38,965,688)**
7. Actuarial Gain/(Loss) *(3 + 6)*	**$ (46,159,876)**

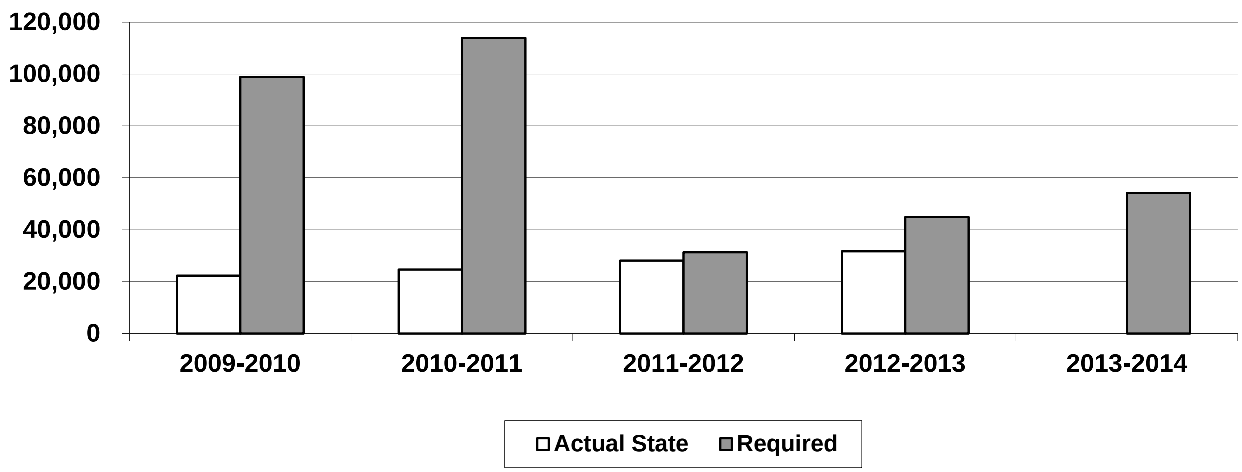
CONTRIBUTIONS

Contributions to the Retirement System are made by the Members, municipalities, and the State of Oklahoma. Member contributions equal 8% of base salary. Municipalities contribute 13% of base salary per year for plan years after June 30, 1996.

The active Deferred Option Plan Members do not make employee contributions to the System. However, municipalities continue contributing for them, with 50% of the contribution going into the System fund and 50% going into the Deferred Option Account. Contributions for members who retroactively elect to enter the Deferred Option Plan as of an earlier date are also deposited into the Deferred Option Account.

Beginning in fiscal year July 1, 2004 and ending June 30, 2009, the fund received 17% of the insurance premium tax. For years after that, the fund will receive 14% of the taxes. Beginning in fiscal year July 1, 2006, the system began receiving 26% of a special allocation established to refund the System for reduced allocations of insurance premium taxes resulting from increases in insurance premium tax credits. Beginning in fiscal year July 1, 2010, the amount of tax apportioned will be applied prior to the calculation of the Home Office Credit.

State Contributions Received versus Contributions Required by Funding Policy (000's)



As of July 1, 2003, the amortization period was changed to 30 years from 1988.

TEN-YEAR PROJECTED CASH FLOW
(RETIREMENT BENEFIT PAYMENTS)

Plan Year Ending	Actives	Retirees [1]	Total
6/30/2014	$ 78,132,939	$ 106,993,930	$ 185,126,869
6/30/2015	$ 45,806,146	$ 95,980,050	$ 141,786,196
6/30/2016	$ 54,079,547	$ 95,467,164	$ 149,546,711
6/30/2017	$ 52,171,454	$ 94,868,960	$ 147,040,414
6/30/2018	$ 62,755,201	$ 94,041,838	$ 156,797,040
6/30/2019	$ 67,907,913	$ 93,114,273	$ 161,022,186
6/30/2020	$ 81,819,639	$ 92,053,270	$ 173,872,909
6/30/2021	$ 89,842,846	$ 90,981,726	$ 180,824,572
6/30/2022	$ 89,497,175	$ 89,792,948	$ 179,290,124
6/30/2023	$ 100,071,320	$ 88,451,753	$ 188,523,073

[1] Includes DOP Members, Disabled Members, Beneficiaries and Terminated Members.

Section 2.1 ASC 960 Information

Section 2.2 GASB No. 25 Information

ASC 960 INFORMATION

A. Actuarial Present Value of Accumulated System Benefits

The actuarial present value of vested and non-vested accumulated system benefits was computed on an ongoing system basis in order to provide required information under FASB Accounting Standards Codification (ASC) 960. In this calculation, a determination is made of all benefits earned by current Members as of the valuation date; the actuarial present value is then computed using demographic assumptions and an assumed interest rate. Assumptions regarding future salary and accrual of future benefit service are not necessary for this purpose.

Accumulated System Benefits	July 1, 2013	July 1, 2012
Vested Benefits		
a. Active Members	$ 775,160,336	$ 759,517,646
b. Deferred Option Plan Members	21,283,406	22,818,369
c. Terminated Members	20,039,858	21,409,764
d. Members Receiving Benefits	1,037,456,527	983,507,261
e. Total Vested Benefits	$ 1,853,940,127	$ 1,787,253,040
Non-vested Benefits	112,948,419	95,064,126
Total Accumulated System Benefits	**$ 1,966,888,546**	**$ 1,882,317,166**
Assumed Rate of Interest	7.5%	7.5%
Market Value of Assets Available for Benefits	$ 1,976,839,000	$ 1,784,760,000
Funded Ratio	100.5%	94.8%

Number of Members	July 1, 2013	July 1, 2012
Vested Members		
a. Active Members	2,354	2,364
b. Deferred Option Plan Members	27	37
c. Members with Deferred Benefits	118	126
d. Members Receiving Benefits	3,239	3,148
e. Total Vested Members	5,738	5,675
Non-vested Members	2,842	2,737
Total Members	**8,580**	**8,412**

ASC 960 Information (continued)

B. Statement of Changes in Accumulated System Benefits

A statement of changes in the actuarial present value of accumulated system benefits follows. This statement shows the effect of certain events on the actuarial present value shown on the previous page.

Actuarial Present Value of Accumulated System Benefits as of July 1, 2012	**$ 1,882,317,166**
Increase/(Decrease) During Year Attributable to:	
a. Normal Cost	58,193,244
b. Increase for Interest Due to Decrease in Discount Period	141,240,143
c. Benefits Paid, Including Refund of Contributions	(114,617,000)
d. System Amendment	0
e. Assumption Changes	(4,556,646)
f. (Gains)/Losses	4,311,639
Net Increase/(Decrease)	84,571,380
Actuarial Present Value of Accumulated System Benefits as of July 1, 2013	**$ 1,966,888,546**

The benefits valued include all benefits – retirement, preretirement death and vested termination – payable from the System for employee service prior to the valuation date. Benefits are assumed to accrue/(accumulate) in accordance with the system provisions.

GASB No. 25 Information

Supplementary Schedules

The GASB has issued the statement titled Financial Reporting for Defined Benefit and Note Disclosures for Defined Contribution Plans (GASB Statement No. 25). This standard became effective for periods beginning after June 15, 1996, and requires funding status to be measured based upon the actuarial funding method adopted by the Board, i.e., for the Oklahoma Police Retirement System, the Entry Age Normal Cost Method. The target value of assets is equal to the Actuarial Accrued Liability (AAL). The actual value of assets is the Actuarial Value developed later in this report. This GASB standard supersedes GASB Statement No. 5 in its entirety.

A. Schedules of Funding Progress

The GASB Statement No. 25 liabilities and assets resulting from the last ten actuarial valuations are as follows:

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
07/01/2004	$ 1,399,975,000	$ 1,727,162,602	$ 327,187,602	81.0%	$ 175,559,285	186.4%
07/01/2005	$ 1,423,834,000	$ 1,811,572,114	$ 387,738,114	78.6%	$ 188,848,451	205.3%
07/01/2006	$ 1,490,208,000	$ 1,910,059,072	$ 419,851,072	78.0%	$ 204,189,807	205.6%
07/01/2007	$ 1,627,476,000	$ 2,035,653,471	$ 408,177,471	79.9%	$ 220,884,875	184.8%
07/01/2008	$ 1,752,169,000	$ 2,132,175,698	$ 380,006,698	82.2%	$ 239,804,959	158.5%
07/01/2009	$ 1,717,566,000	$ 2,253,133,775	$ 535,567,775	76.2%	$ 253,955,863	210.9%
07/01/2010	$ 1,754,372,000	$ 2,341,619,152	$ 587,247,152	74.9%	$ 249,582,676	235.3%
07/01/2011	$ 1,822,702,000	$ 1,959,976,006	$ 137,274,006	93.0%	$ 257,504,567	53.3%
07/01/2012	$ 1,834,170,000	$ 2,034,485,171	$ 200,315,171	90.2%	$ 266,038,359	75.3%
07/01/2013	$ 1,902,581,000	$ 2,131,172,172	$ 228,591,172	89.3%	$ 279,013,522	81.9%

GASB NO. 25 INFORMATION (CONTINUED)

B. Schedule of Employer Contributions

The GASB Statement No. 25 required and actual contributions for the last ten fiscal years are as follows:

Year Ended June 30	Annual Required Contribution	Percentage Contributed
2004	$ 63,511,155	37.7%
2005	$ 73,756,197	66.1%
2006	$ 85,391,444	58.6%
2007	$ 95,082,357	59.3%
2008	$ 100,561,406	55.8%
2009	$ 102,609,620	57.1%
2010	$ 132,456,043	41.2%
2011	$ 146,816,207	38.5%
2012	$ 64,745,656	94.2%
2013	$ 79,313,650	83.3%

This section presents information regarding System assets as reported by the auditor. The System assets represent the portion of total System liabilities, which has been funded as of the valuation date.

SUMMARY OF ASSETS

Asset Category	Market Value as of June 30, 2013	Market Value as of June 30, 2012
1. Cash and Short-term Investments	$ 66,068,000	$ 47,146,000
2. Receivables		
a. Interest and Dividends	$ 3,348,000	$ 3,157,000
b. Member Contributions	1,058,000	954,000
c. Employer Contributions	1,734,000	1,529,000
d. Insurance Premium Tax	6,616,000	5,520,000
e. Investments Sold	147,000	4,349,000
f. Other Receivables	0	0
g. Total	$ 12,903,000	$ 15,509,000
3. Investments at Fair Value		
a. Domestic Government Bonds	$ 12,994,000	$ 18,418,000
b. International Government Bonds	0	0
c. Corporate Bonds [1]	360,353,000	344,515,000
d. Domestic Stock	543,003,000	441,609,000
e. International Stock	257,200,000	205,997,000
f. Other	725,525,000	715,669,000
g. Securities Lending Short-Term Pool	20,003,000	26,729,000
h. Total	$ 1,919,078,000	$ 1,752,937,000
4. Assets used in System Operations		
a. Furniture, Fixtures and Equipment	$ 507,000	$ 710,000
5. Total Assets	$ 1,998,556,000	$ 1,816,302,000
6. Liabilities		
a. Payable for Investments Purchased	$ 694,000	$ 3,599,000
b. Accounts Payable and Accrued Expenses	1,020,000	1,214,000
c. Securities Lending Collateral Payable	20,003,000	26,729,000
d. Total Liabilities	$ 21,717,000	$ 31,542,000
7. Net Assets for Pension Benefits	**$ 1,976,839,000**	**$ 1,784,760,000**

[1] Includes Domestic and International Bonds

RECONCILIATION OF ASSETS

Transactions	June 30, 2013	June 30, 2012
Additions		
1. Contributions		
a. Contributions from Employers	$ 34,645,000	$ 32,896,000
b. Contributions from System Members	21,518,000	20,113,000
c. Insurance Premium Tax	31,412,000	28,092,000
d. Total	$ 87,575,000	$ 81,101,000
2. Net Investment Income		
a. Interest	$ 7,840,000	$ 7,547,000
b. Dividends	12,614,000	10,318,000
c. Realized Gain and Unrealized Appreciation	212,083,000	1,676,000
d. Income from Securities Lending	59,000	54,000
e. Other	551,000	590,000
f. Total	$ 233,147,000	$ 20,185,000
g. Investment Expense	(11,973,000)	(11,811,000)
h. Net Investment Income	$ 221,174,000	$ 8,374,000
3. Total Additions	$ 308,749,000	$ 89,475,000
Deductions		
4. Retirement Benefits	$ (112,787,000)	$ 112,653,000
5. Refund of Contributions	(1,830,000)	(1,570,000)
6. Administrative Expenses	(2,053,000)	(1,952,000)
7. Total Deductions	(116,670,000)	(16,175,000)
8. Net Increase	192,079,000	(26,700,000)
9. Net Assets Held in Trust for Pension Benefits		
a. Beginning of Year	$ 1,784,760,000	$ 1,811,460,000
b. End of Year	$ 1,976,839,000	$ 1,784,760,000
Reconciliation of Actuarial Asset Value and Market Value		
Actuarial Asset Value	$ 1,902,581,000	$ 1,834,170,000
Deferred Gain/(Loss)	$ 74,258,000	$ (49,410,000)
Impact of Market Value Corridor	$ 0	$ 0
Market Value	$ 1,976,839,000	$ 1,784,760,000

ACTUARIAL VALUE OF ASSETS

Schedule of Assets Gains/(Losses)				
Year	**Original Amount**	**Recognized in Prior Years**	**Recognized This Year**	**Recognized in Future Years**
2008/2009	$ (414,206,995)	$ (331,365,596)	$ (82,841,399)	$ 0
2009/2010	109,851,050	63,910,630	21,970,210	21,970,210
2010/2011	151,836,917	60,734,766	30,367,383	60,734,768
2011/2012	(127,013,357)	(25,402,671)	(25,402,671)	(76,208,015)
2012/2013	84,701,826	0	16,940,365	67,761,461
Total	**$ (194,830,559)**	**$ (230,122,871)**	**$ (38,966,112)**	**$ 74,258,424**

Development of Actuarial Value of Assets	
1. Actuarial Value as of July 1, 2012	$ 1,834,170,000
2. Contributions	
a. Member	21,518,000
b. Employer	34,645,000
c. Insurance tax	31,412,000
d. Total (a + b + c)	$ 87,575,000
3. Decreases During the Year	
a. Benefit Payments	$ 112,787,000
b. Return of Member Contributions	1,830,000
c. Non-investment Expenses	2,053,000
d. Total (a + b + c)	$ 116,670,000
4. Expected Return at 7.5% on:	
a. Item 1	$ 137,562,750
b. Item 2 (one-half year)	3,284,063
c. Item 3 (one-half year)	4,375,125
d. Total (a + b - c)	$ 136,471,688
5. Expected Actuarial Value of Assets June 30, 2013 (1 + 2 - 3 + 4)	$ 1,941,546,688
6. Unrecognized Asset Gain/(Loss) as of June 30, 2012	$ (49,409,514)
7. Expected Actuarial Value June 30, 2013 plus previous year's Unrecognized Asset Gain (5 + 6)	$ 1,892,137,174
8. Market Value as of June 30, 2013	$ 1,976,839,000
9. 2011/2012 Asset Gain/(Loss) (8 - 7)	$ 84,701,826
10. Asset Gain/(Loss) to be Recognized as of June 30, 2013	$ (38,966,112)
11. Initial Actuarial Value July 1, 2012 (5 + 10) (Rounded to $1,000's)	$ 1,902,581,000
12. Constraining Values:	
a. 80% of Market Value (8 x 0.8)	$ 1,581,471,000
b. 120% of Market Value (8 x 1.2)	$ 2,372,207,000
13. Actuarial Value July 1, 2013 ***(11), but no less than (12a), nor greater than (12b)***	$ 1,902,581,000

AVERAGE ANNUAL RATES OF INVESTMENT RETURN

Year Ending June 30	Actuarial Value		Market Value	
	Annual	Cumulative	Annual	Cumulative
1990	8.6%	8.6%	9.2%	9.2%
1991	7.9%	8.2%	8.1%	8.6%
1992	8.7%	8.4%	13.8%	10.3%
1993	10.3%	8.9%	15.1%	11.5%
1994	9.3%	9.0%	0.0%	9.1%
1995	11.0%	9.3%	17.7%	10.5%
1996	11.9%	9.7%	13.5%	10.9%
1997	12.8%	10.1%	17.3%	11.7%
1998	13.5%	10.4%	16.9%	12.3%
1999	14.3%	10.8%	9.7%	12.0%
2000	12.8%	11.0%	8.7%	11.7%
2001	8.8%	10.8%	(5.3%)	10.2%
2002	4.9%	10.3%	(5.6%)	8.9%
2003	2.7%	9.8%	3.5%	8.5%
2004	3.3%	9.3%	15.0%	8.9%
2005	3.0%	8.9%	8.7%	8.9%
2006	6.1%	8.8%	11.0%	9.0%
2007	10.6%	8.9%	17.3%	9.5%
2008	8.9%	8.9%	(2.4%)	8.8%
2009	(0.9%)	8.3%	(16.4%)	7.4%
2010	4.4%	8.2%	11.7%	7.6%
2011	5.6%	8.0%	18.3%	8.0%
2012	2.6%	7.8%	0.5%	7.7%
2013	5.4%	7.7%	12.5%	7.9%

Annual Returns before 1998 exclude DOP assets.

This section presents and describes the basis of the valuation. The census of Members, actuarial basis and benefit provisions of the System are the foundation of the valuation, since these are the present facts on which the projection of benefit payments will depend. The valuation is based on the premise that the System will continue in existence.

Section 4.1 System Members

Section 4.2 Actuarial Basis

Section 4.3 Summary of System Provisions

SYSTEM MEMBERS

A. Member Data Reconciliation

	Active Members		Inactive Members					
	Regular	**Deferred Option Plan**	**Refund Due to Member**	**Deferred Vested Members**	**Retired Members**	**Disabled Members**	**Bene-ficiaries**	**Total**
As of July l, 2012	**4,441**	**37**	**660**	**126**	**2,368**	**138**	**642**	**8,412**
Deferred Option Plan Retirees	(2)	2	0	0	0	0	0	0
Age Retirements	(96)	(12)	0	(14)	122	0	0	0
Disability Retirements	(4)	0	0	0	0	4	0	0
Deaths Without Beneficiaries	0	0	0	0	(22)	(3)	(28)	(53)
Deaths With Beneficiaries	(2)	0	0	0	(26)	(4)	32	0
Vested Terminations	(19)	0	0	19	0	0	0	0
Rehires	15	0	(11)	(4)	0	0	0	0
Expiration of Benefits	0	0	0	0	0	0	(7)	(7)
Termination Without Refund	(78)	0	78	0	0	0	0	0
Terminations Electing a Refund	(109)	0	(35)	(6)	0	0	0	(150)
Alternate Payee of a Qualified Domestic Relations Order	0	0	0	0	0	0	12	12
Data Corrections	9	0	11	(3)	(1)	4	8	28
Transfers Out	0	0	0	0	0	0	0	0
Transfers In	0	0	0	0	0	0	0	0
Net Change	(286)	(10)	43	(8)	73	1	17	(170)
New Entrants During the Year	312	0	26	0	0	0	0	338
As of July l, 2013	**4,467**	**27**	**729**	**118**	**2,441**	**139**	**659**	**8,580**

SYSTEM MEMBERS (CONTINUED)

B. Count of Active Members

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
Under 20										0
20-24	123									123
25-29	463	85								548
30-34	288	372	63							723
35-39	153	250	321	68						792
40-44	97	152	237	307	73					866
45-49	40	59	88	162	283	61				693
50-54	2	26	33	72	159	149	48			489
55-59	1	1	9	29	36	37	60	8		181
60-64	1		2	9	8	13	10	4		47
65-69					2		2		1	5
70-74										0
75+										0
Total	**1,168**	**945**	**753**	**647**	**561**	**260**	**120**	**12**	**1**	**4,467**

C. Average Compensation

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
Under 20										0
20-24	38,960									38,960
25-29	43,976	52,511								45,300
30-34	44,399	56,734	65,152							52,554
35-39	43,107	55,774	68,644	73,142						60,034
40-44	41,151	51,467	65,945	73,951	81,225					64,753
45-49	39,462	49,288	64,670	70,504	82,002	84,331				72,078
50-54		52,751	62,407	67,894	78,726	85,116	88,262			77,357
55-59				65,357	69,579	78,276	88,746			77,504
60-64										72,951
65-69										90,007
70-74										0
75+										0
Total	**43,021**	**54,684**	**66,602**	**71,864**	**79,980**	**83,649**	**87,822**	**92,044**	**88,246**	**61,992**

Average compensation not shown for groupings of less than twenty members

SYSTEM MEMBERS (CONTINUED)

D. Members in Pay Status - Annual Benefits

Attained Age	Retired Members		Beneficiaries		Disabled Members		Current Payment Total	
	No.	Benefit	No.	Benefit	No.	Benefit	No.	Benefit
Under 50	116	$ 3,852,898	47	$ 749,203	31	$ 372,183	194	$ 4,974,284
50-54	266	7,587,338	42	726,822	12	159,169	320	8,473,329
55-59	428	12,768,159	74	1,467,976	20	270,015	522	14,506,150
60-64	550	17,040,592	87	1,973,031	23	293,907	660	19,307,530
65-69	505	15,688,873	87	2,425,779	15	250,446	607	18,365,098
70-74	285	8,683,148	82	2,494,428	16	361,881	383	11,539,457
75-79	167	5,343,824	79	2,681,183	12	328,444	258	8,353,451
80-84	75	2,547,476	80	2,635,045	7	230,787	162	5,413,308
85-89	38	1,344,647	48	1,578,785	3	84,101	89	3,007,533
90+	11	357,761	33	979,004			44	1,336,765
Total	**2,441**	**$ 75,214,716**	**659**	**$ 17,711,256**	**139**	**$ 2,350,933**	**3,239**	**$ 95,276,905**

SYSTEM MEMBERS (CONTINUED)

E. Terminated Vested and Deferred Option Plan Members - Annual Benefits

Attained Age	Terminated Vested Members		Deferred Option Plan Members	
	No.	Benefit	No.	Benefit
Under 40	24	$ 345,091	0	$ 0
40-44	33	509,354	0	0
45-49	33	604,199	3	136,237
50-54	11	163,186	9	404,066
55-59	13	241,179	8	356,357
60-64	4	96,206	6	167,404
65+	0	0	1	27,885
Total	**118**	**$ 1,959,215**	**27**	**$ 1,091,949**

System Members (Continued)

F. Member Statistics

Inactive Members as of July 1, 2013	Number	Amount of Annual Benefit
Members Receiving Benefits		
a. Retired	2,441	$ 75,214,716
b. Beneficiaries	659	17,711,256
c. Disabled	139	2,350,933
Total	**3,239**	**$ 95,276,905**
Terminated Vested	118	$ 1,959,215
Deferred Option Plan Members	27	$ 1,091,949
Terminated Members with Refunds Due	729	N/A

Statistics for Active Members	Number	Average		
		Age	Service	Earnings
As of July 1, 2012				
a. Continuing	4,062	40.6	13.0	$ 61,305
b. New	379	29.9	1.1	38,282
Total	**4,441**	**39.6**	**11.9**	**$ 59,340**
As of July 1, 2013				
a. Continuing	4,131	40.7	13.0	$ 63,755
b. New	336	29.5	0.8	40,322
Total	**4,467**	**39.8**	**12.1**	**$ 61,992**

ACTUARIAL BASIS

A. Entry Age Actuarial Cost Method

The actuarial cost method is selected by the Board with the recommendation of the actuary. Liabilities and contributions shown in this report are computed using the Individual Entry Age method of funding. The System has used this cost method since at least 1990.

Sometimes called "funding method", this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the system is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each Member would have been eligible to join the system if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the system.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date.) The **Unfunded Actuarial Accrued Liability** is the excess of the actuarial accrued liability over the actuarial value of system assets on the valuation date.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

B. Asset Valuation Method

The asset valuation method is selected by the Board with the recommendation of the actuary. The actuarial value of assets is based on a five-year moving average of expected and market values determined as follows:

- at the beginning of each plan year, a preliminary expected actuarial asset value is calculated as the sum of the previous year's actuarial value increased with a year's interest at the System valuation rate plus net cash flow adjusted for interest (at the same rate) to the end of the previous plan year;

ACTUARIAL BASIS (CONTINUED)

B. Asset Valuation Method (continued)

- the expected actuarial asset value is set equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the beginning of the previous plan year;

- the difference between the expected actuarial asset value and the market value is the investment gain or loss for the previous plan year;

- the (final) actuarial asset value is the preliminary value plus 20% of the investment gains and losses for each of the five previous plan years, but in no case more than 120% of the market value or less than 80% of the market value.

- Deferred Option Plan assets are included in the actuarial value. For all periods following July 1, 2007, the Deferred Option Plan assets are subject to the same smoothing method stated above. Prior to July 1, 2007, they were included at market value but were not subject to the smoothing described above.

Besides the changes to the smoothing of Deferred Option Plan assets, the System has used this method since at least 1998.

C. Valuation Procedures

No actuarial accrued liability is held for non-vested, inactive Members who have a break in service, or for non-vested Members who have quit or been terminated, even if a break in service had not occurred as of the valuation date. The actuarial accrued liability does include a liability for non-vested terminations that have not taken a refund of their accumulated contribution balance.

The wages used in the projection of benefits and liabilities are based upon the prior year's actual earnings increased by the salary scale.

In computing accrued benefits, average earnings were determined using actual pay history.

No benefits are projected to be greater than the compensation limitation and dollar limitation required by the Internal Revenue Code Section 401 and 415 for governmental plans.

ACTUARIAL BASIS (CONTINUED)

C. Valuation Procedures (continued)

The calculations for the required state contribution are determined as of mid-year. This is a reasonable assumption since the employer contributions, employee contributions and State insurance premium tax allocations are made on a monthly basis throughout the year, and mid-year represents an average weighting of the contributions.

The contribution requirements are based on total annual compensation rather than total covered compensation of employees under assumed retirement age. This is a better reflection of the overall expectations for the System.

The Entry Age Normal Funding Method has been adjusted for those members granted prior service. The prior service is treated as occurring immediately before the membership date. Level pay is assumed during this period before actual membership. Entry Age costs are determined as if the member entered the System on the date the prior service is assumed to have begun. This treatment reflects the extra cost of prior service immediately in the accrued liability and preserves the relationship of normal cost to a year of service accrual.

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions

The actuarial assumptions are selected by the Board with the recommendation of the actuary. The most recent experience study considered actual System experience for the period July 1, 2007 through June 30, 2012.

Economic Assumptions

1. Investment Return — 7.5%, net of investment expenses, per annum, compound annually. The System has used this assumption since at least 1984.

2. Earnings Progression — Sample rates below:

Years of Service	Inflation %	Merit %	Increase %
0	3.0	14.00	17.00
1	3.0	10.00	13.00
2	3.0	6.30	9.30
3	3.0	5.90	8.90
4	3.0	5.50	8.50
5	3.0	5.10	8.10
6	3.0	4.70	7.70
7	3.0	4.30	7.30
8	3.0	3.90	6.90
9	3.0	3.50	6.50
10	3.0	3.15	6.15
15	3.0	1.70	4.70
20	3.0	1.50	4.50

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions (continued)

Demographic Assumptions

1. Retirement Rates See table below:

Years of Service	Annual Rates of Retirement Per 100 Eligible Members
20	20
21	6
22	6
23	6
24	10
25	20
26	10
27	10
28	10
29	15
30	100

2. Mortality Rates

(a) Active employees (pre-retirement) — RP-2000 Blue Collar Healthy Combined (Fully generational using Scale AA) with age set back four years

(b) Active employees (post-retirement and nondisabled pensioners) — RP-2000 Blue Collar Healthy Combined (Fully generational using Scale AA)

(c) Disabled pensioners — RP-2000 Blue Collar Healthy Combined with age set forward 4 years

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions (continued)

Demographic Assumptions (continued)

3. Disability Rates — Graduated rates. See table below:

Age Range	Annual Rate
20-24	.0002
25-29	.0002
30-34	.0004
35-39	.0006
40-44	.0008
45-49	.0010
50-54	.0012
55-59	.0014

4. Withdrawal Rates — Graduated rates by years of service. See table below:

Service Range	Annual Rate
0	.200
1	.130
2	.080
3	.060
4	.060
5-10	.040
11-15	.015
16-20	.010
Over 20	.000

5. Marital Status

   (a) Percentage married: 85% of participants are assumed to be married.

   (b) Age difference: Males are assumed to be three (3) years older than females.

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions (continued)

<u>Other Assumptions</u>

1. Assumed Age of Commencement for Deferred Benefits:	Age 50, or the date at which the participant would have achieved twenty years of service, if later.
2. Provision for Expenses:	Administrative Expenses, as budgeted by the Oklahoma Police Pension and Retirement System.
3. Percentage of Disability:	Members becoming disabled have a 25%-49% impairment.
4. Duty-Related Death:	All active pre-retirement deaths are duty-related.
5. Cost-of-Living Allowance:	Police officers eligible to receive increased benefits according to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of 1/3 to 1/2 of the increase or decrease of any adjustment to the base salary of a regular police officer, based on an increase in base salary of 3%.
6. Deferred Option Plan:	Members currently participating in the Deferred Option Plan (DOP) are assumed to remain in the DOP for the maximum of five years. Active members leaving active service are assumed to retroactively elect to join the DOP for the maximum allowable period. DOP account balances are assumed to accumulate at 7.75% (to reflect the interest rate guarantee prior to retirement) and members are assumed to elect a lump sum at retirement. All balances held in Deferred Option Payout Accounts are assumed to be paid immediately.

SUMMARY OF SYSTEM PROVISIONS

Effective Date and Plan Year: The System became effective January 1, 1981 and has been amended each year since then. The plan year is July 1 to June 30.

Administration: The System is administered by the Oklahoma Police Pension and Retirement Board consisting of thirteen Members. The Board shall be responsible for the policies and rules for the general administration of the System.

Type of Plan: A defined benefit plan.

Employers Included: An eligible employer may join the System on the first day of any month. An application of affiliation must be filed in the form of a resolution before the eligible municipality can become a participating municipality.

Eligibility: All persons employed full-time as officers working more than 25 hours per week or any person undergoing police training to become a permanent police officer with a police department of a participating municipality, with ages not less than twenty-one (21) nor more than forty-five (45) when accepted for membership.

Service Considered: Credited service consists of the period during which the Member participated in the System or predecessor municipal plan as an active employee, plus any service prior to the establishment of the municipal plan which was credited under the predecessor municipal systems or credited service granted by the State Board, plus any applicable military service.

Salary Considered: Base salary used in the determination of benefits does not include payment for accumulated sick and annual leave upon termination of employment or any uniform allowances.

Final average salary means the average paid base salary for normally scheduled hours of an officer over the highest 30 consecutive months of the last 60 months of credited service.

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

State Contributions: Insurance premium tax allocation. Historically, the System has received 14% of these collected taxes. For the fiscal years beginning July 1, 2004 and ending June 30, 2009, the System received 17% of these collected taxes. For the fiscal year beginning July 1, 2009 and each fiscal year thereafter, the System received 14% of these collected taxes. Beginning in fiscal year July 1, 2006, the System began receiving 26% of a special allocation established to refund the System for reduced allocations of insurance premium taxes resulting from increases in insurance premium tax credits. Beginning in fiscal year July 1, 2010, the amount of insurance premium tax apportioned to the System will be applied prior to the calculation of the Home Office Credit.

Municipality Contributions: Contribution is thirteen (13%) percent as of July 1, 1996.

Member Contributions: Eight (8%) percent of base salary. These contributions shall be "picked up" after December 31, 1988 pursuant to Section 414(h)(2) of the Internal Revenue Code.

Normal Retirement Benefit:

Eligibility: 20 years of credited service.

Benefit: 2 1/2% of the final average salary multiplied by the years of credited service, with a maximum of 30 years of credited service considered.

Form of Benefit: The normal form of benefit is a Joint and 100% Survivor Annuity if the Member has been married 30 months prior to death.

Cost-of-Living Adjustments: Police officers eligible to receive increased benefits according to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order shall receive an adjustment of 1/3 to 1/2 of the increase or decrease of any adjustment to the base salary of a regular police officer.

Termination:

Less Than 10 Years of Service: A refund of contributions without interest.

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

More than 10 Years of Service:	If greater than 10 years of service, but not eligible for the Normal Retirement Benefit, the benefit is payable at the later of the date the Member would have had 20 years of service or attained age 50 in an amount equal to 2 1/2% of the final average salary multiplied by the years of credited service. The Member may elect a refund of contributions instead of the retirement benefit.
Disability Benefit (Duty):	Total Disability
	Upon determination of total disability incurred as a result of the performance of duty, the normal disability benefit is 50% of final average salary.
	Partial Disability
	Upon determination of partial disability incurred as a result of the performance of duty, the normal disability is reduced according to the percentage of impairment, as outlined in the "American Medical Association's Guide to the Evaluation of Permanent Impairment." The following shows the percent of normal disability benefit payable as related to the percent of impairment.

% Impairment	% of Benefit
1% to 49%	50%
50% to 74%	75%
75% to 100%	100%

Disability Benefit (Non-Duty):	Upon determination of disability after 10 years of service due to causes other than duty, the benefit equals the accrued benefit of 2 1/2% of final average salary times years of credited service (maximum of 30 years) times:

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

- 100%, if permanent and total, or
- the following percentages, if partial disability.

1% to 24%	25%
25% to 49%	50%
50% to 74%	75%
75% to 99%	90%

Death Benefits Payable to Beneficiaries:

Prior to Retirement (Duty): The greater of:

1) 2 1/2% of final average salary times years of credited service (maximum of 30 years), or

2) 50% of final average salary.

Prior to Retirement (Non-Duty): After 10 years of service, a benefit equal to 2 1/2% of final average salary times years of credited service (maximum of 30 years).

Prior to 10 years of service, a refund of the accumulated contributions made by the Member will be paid to the estate.

After Retirement: 100% of the Member's retirement or deferred vested benefit, payable when the Member would have been eligible to receive it, payable to the beneficiary.

Death Benefit: The beneficiary shall receive a death benefit amount of $5,000.

Beneficiary: Surviving spouses must be married to the member for 30 continuous months prior to the date of death (waived in the case of duty related death).

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

If the beneficiary is a child, the benefits are payable to age 18, or 22 if a full-time student.

Deferred Option Plan:

A Member who has 20 or more years of service and continues employment may elect to participate in the Deferred Option Plan (DOP). Participation in the DOP shall not exceed five years. The employees' contributions cease upon entering the Plan, but the employer contributions are divided equally between the System and the DOP. The monthly retirement benefits that the employee is eligible to receive are paid into the DOP account.

A member is also allowed to retroactively elect to join the DOP as of a back-drop-date which is no earlier than the member's normal retirement date or five years before his termination date. The monthly retirement benefits and employee contributions that would have been payable had the member elected to join the DOP are credited to the member's DOP account with interest.

The retirement benefits are not recalculated for service and salary past the election date to join the DOP. However, the benefits may be increased by any applicable cost-of-living increases.

When the Member actually retires from active service, the DOP account balance may be paid in a lump sum, to an annuity provider, or transferred to a Deferred Option Payout Account. Monthly retirement benefits are then paid directly to the retired Member.

The original Plan became effective during the July 1, 1990 to June 30, 1991 Plan Year with the back-drop and Payout Account provisions added subsequently. The DOP account of an active member is guaranteed a minimum of the valuation interest rate for investment return, or 2% less than the fund rate of return, if greater. If the balance is transferred to a Payout Account upon retirement, the account is credited with interest at a rate of 2% below the total fund net earnings if the fund returns more than 2%. If the fund realizes negative returns, the account is reduced at a rate equal to the fund net earnings. Alternatively, if the fund realizes a positive return of less than 2%, the account is credited with a rate of zero.