OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT

AS OF JULY 1, 2012

TABLE OF CONTENTS

SECTION	r	Page No.
Highlights		
Pur	pose	1
Sun	nmary of Principal Valuation Results	2
Effe	ects of Changes	3
Def	erred Option Plan	4
Cer	tification	5
Section 1	Funding Results	6
1.1	Summary of Contribution Requirement	7
1.2	Liability Detail	8
1.3	•	9
1.4	Actuarial Gain/(Loss)	10
1.5	Contributions	11
1.6	Ten-Year Projected Cash Flow	12
Section 2	Accounting Results	13
2.1	ASC 960 Information	14
2.2	GASB No. 25 Information	16
Section 3	System Assets	18
3.1	Summary of Assets	19
3.2	Reconciliation of Assets	20
3.3	Actuarial Value of Assets	21
3.4	Average Annual Rates of Investment Return	22
Section 4	Basis of Valuation	23
4.1	System Members	24
4.2	Actuarial Basis	29
4.3	Summary of System Provisions	36

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, 2012;
- Review experience under the System for the year ended June 30, 2012; 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, 2012		July 1, 2011	
Accrued Liability	\$	2,034.5	\$	1,960.0	
Actuarial Value of Assets	\$	1,834.2	\$	1,822.7	
Unfunded Accrued Liability	\$	200.3	\$	137.3	
Funded Ratio		90.2%		93.0%	

- 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, decreased from 99.2% to 94.8%.
- The required state contribution for the System increased from \$31.3 million to \$44.9 million.

Contribution Summary (\$000,000)		July 1, 2012		July 1, 2011	
Total Required Contribution	\$	100.4	\$	85.1	
Expected Employee Contributions		21.1		20.3	
Expected Municipality Contributions		34.4		33.5	
Required State Contribution	\$	44.9	\$	31.3	
As a Percentage of Total Payroll		16.9%		12.1%	

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			
	Ju	ıly 1, 2012	Jı	ıly 1, 2011
Summary of Costs	-		-	
Required State Contribution for Current Year	\$	44,891,731	\$	31,270,062
Actual State Contribution Received in Prior Year (1)	\$	28,092,000	\$	24,645,000

GASB No. 25 Funded Status						
Actuarial Accrued Liability	\$ 2,0	034,485,171	\$	1,959,976,006		
Actuarial Value of Assets	\$ 1,8	834,170,000	\$	1,822,702,000		
Unfunded Actuarial Accrued Liability	\$ 2	200,315,171	\$	137,274,006		

Market Value of Assets and Additional Liabilities		
Market Value of Assets	\$ 1,784,760,000	\$ 1,811,460,000
Actuarial Present Value of Accumulated System		
Benefits (ASC 960)	\$ 1,882,317,166	\$ 1,825,786,845
Present Value of Projected System Benefits	\$ 2,551,090,081	\$ 2,443,485,081

Summary of Data		
Number of Members in Valuation		
Active Paid Members	4,441	4,368
Deferred Option Plan Members	37	50
Terminated Members with Refunds Due	660	583
Terminated Members with Deferred Benefits	126	124
Retired Members	2,368	2,292
Beneficiaries	642	631
Disabled Members	138	137
Total	8,412	8,185

Active Member Statistics						
Total Annual Compensation (2)	\$	263,529,629	\$	253,989,944		
Average Compensation (2)	\$	59,340	\$	58,148		
Average Age		39.6		39.6		
Average Service		11.9		12.0		

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, 2012.

Changes in Assumptions in Methods

There were no changes to assumptions or methods since the prior valuation. See Section 4.2 for a description of the assumptions and methods used for the July 1, 2012 valuation.

Changes in Plan Provisions

There were no changes in plan provisions or system benefits with an actuarial impact as of July 1, 2012. See Section 4.3 for a description of the plan provisions used for the July 1, 2012 valuation.

Actuarial Experience During the Plan Year

The System experienced the following gains/(losses) during the year ending June 30, 2012. These amounts are developed in Section 1.4 of this report:

]	Millions
Liability Gain/(Loss)	\$	10.1
Asset Gain/(Loss)	\$	(88.9)
Total Gain/(Loss)	\$	(78.8)

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, 2012, was 7.5%.

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, 2012 was 0.0%.

The assets and liabilities reflected in these results as of July 1, 2012, 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, 2012	July 1, 2011
Number of Active DOP Members	37	50
Account Balances of Active Members	\$ 4.2M	\$ 8.4M
Annual Retirement Benefits of Active Members	\$ 1.3M	\$ 1.9M
Deferred Option Payout Account Balances	\$ 2.6M	\$ 2.3M
Total	\$ 6.8M	\$ 10.7M

We have prepared an actuarial valuation of the Oklahoma Police Pension and Retirement System as of July 1, 2012, for the plan year ending June 30, 2013. The results of the valuation are set forth in this report, which reflects the provisions of the System as amended and effective on July 1, 2012.

The 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.

Any changes in actuarial methods, assumptions and benefit provisions since the last valuation of the System as of July 1, 2011 are summarized on page 3 and the financial impact, if any, are incorporated in this report.

Actuarial Certification

The Board selected the assumptions used for the results in this report. I believe that these assumptions are reasonable and comply with the requirements of GASB 25. I prepared this report's exhibits in accordance with the requirements of these standards.

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, Consulting Actuary

Doug Fiddler, A.S.A., E.A., M.A.A.A.

Director, Consulting Actuary

- Section 1.1 Summary of Contribution Requirement
- Section 1.2 Liability Detail
- Section 1.3 Unfunded Actuarial Accrued Liability
- Section 1.4 Actuarial Gain/(Loss)
- Section 1.5 Contributions
- Section 1.6 Ten-Year Projected Cash Flow

SUMMARY OF CONTRIBUTION REQUIREMENT

		Actuarial Valuation as of				
		July 1,	2012	July 1, 2	2011	
		Amount	% of Active Covered Comp.	Amount	% of Active Covered Comp.	
1.	Annual Covered Compensation for Members Included in Valuation					
	a. Active Members	\$263,529,629	N/A	\$253,989,944	N/A	
	b. Deferred Option Plan Members	2,508,730	N/A	3,514,623	N/A	
	c. Total	\$266,038,359	N/A	\$257,504,567	N/A	
2.	Total Normal Cost Mid-year	\$ 56,159,687	21.3%	\$ 56,906,021	22.4%	
3.	Unfunded Actuarial Accrued Liability	\$200,315,171	N/A	\$137,274,006	N/A	
4.	Amortization of Unfunded Actuarial Accrued Liability over 30 years From					
	July 1, 1988 at mid-year	\$ 41,187,422	15.6%	\$ 25,013,281	9.8%	
5.	Budgeted Expenses	\$ 3,048,911	1.2%	\$ 3,145,550	1.2%	
6.	Total Required Contribution $(2 + 4 + 5)$	\$100,396,020	38.1%	\$ 85,064,852	33.5%	
7.	Estimated Employee Contribution (8% x 1a)	\$ 21,082,370	8.0%	\$ 20,319,196	8.0%	
8.	Estimated Municipality Contributions					
	a. Active Members	\$ 34,258,852	13.0%	\$ 33,018,693	13.0%	
	b. Deferred Option Plan Members	163,067	6.5%(1)	456,901	13.0%(1)	
	c. Total	\$ 34,421,919	$12.9\%^{(2)}$	\$ 33,475,594	13.0%(2)	
9.	amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 1988 at mid-year.	4.44.004.704	16.09(2)	4.24.250.00	10.15(0)	
10	(6 - 7 - 8c)	\$ 44,891,731	16.9%(2)	\$ 31,270,062	12.1%(2)	
	Previous year's actual State Contribution ⁽³⁾	\$ 28,092,000	10.9%(4)	\$ 24,645,000	9.7%(4)	
11.	Approximate period over which previous year's State Contribution will amortize current Unfunded Actuarial Accrued Liability (UAAL)	\$ 10 ⁽⁵⁾	N/A	\$ 9 ⁽⁵⁾	N/A	

Percentage of Deferred Option Plan Members' covered compensation. For July 1, 2012, we have reflected that only 50% of the employer contribution is made to the System.

⁽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.

Shown as a percent of previous year's total covered compensation (\$297,504,567 for 2011 and \$253,259,725 for 2010).

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, 2012
Present Value of Benefits	\$ 2,551,090,081
Present Value of Future Normal Costs	\$ 516,604,910
Accrued Liability	\$ 2,034,485,171
Normal Cost Mid-Year	\$ 56,159,687

Active	-	
a. Retirement	\$	999,775,790
b. Disability		(424,227)
c. Withdrawal		2,370,487
d. Death		5,027,727
e. Total	\$	1,006,749,777
Inactive	-	
1. Members Eligible for Automatic COLA		
a. Retired Members	\$	78,538,994
b. Disabled Members		11,774,192
c. Beneficiaries		65,556,275
d. Total	\$	155,869,461
2. Members Not Eligible for Automatic COLA		
a. Retired Members	\$	739,551,561
b. Disabled Members		13,669,471
c. Terminated Members		21,409,764
d. Deferred Option Plan Members		22,818,369
e. Beneficiaries		74,416,768
f. Total	\$	871,865,933
3. Total Inactive $(1d + 2f)$	\$	1,027,735,394
Accrued Liability (Active + Inactive)	\$	2,034,485,171

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, 2012	July 1, 2011	
1. Actuarial Present Value of Benefits			
a. Active Members	\$1,523,354,687	\$1,445,712,140	
b. Terminated Members	21,409,764	18,155,036	
c. Members Receiving Benefits who are not eligible for			
Automatic COLA	827,637,800	776,657,871	
d. Members Receiving Benefits who are eligible for			
Automatic COLA	155,869,461	167,424,051	
e. Deferred Option Plan Members	22,818,369	35,535,983	
f. Total	\$2,551,090,081	\$2,443,485,081	
2. Actuarial Present Value of Future Normal Costs	516,604,910	483,509,075	
3. Total Actuarial Accrued Liability (1f - 2)	2,034,485,171	1,959,976,006	
4. Actuarial Value of Assets	1,834,170,000	1,822,702,000	
5. Unfunded Actuarial Accrued Liability			
(3 - 4, not less than \$0)	\$ 200,315,171	\$ 137,274,006	

SECTION 1.4 Page 10

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, 2012.

1. Expected Actuarial Accrued Liability	
a. Actuarial Accrued Liability at July 1, 2011	\$ 1,959,976,006
b. Normal Cost for Plan Year Ending June 30, 2012	54,058,923
c. Benefit Payments for Plan Year Ending June 30, 2012	114,223,000
d. Interest on a + b - c to End of Year	144,742,048
e. Expected Actuarial Accrued Liability Before Changes $(a + b - c + d)$	2,044,553,977
f. Change in Actuarial Accrued Liability at July 1, 2012 due to changes in	
Actuarial Assumptions	0
g. Change in Actuarial Accrued Liability at July 1, 2012 due to changes in	
System Provisions	0
h. Expected Actuarial Accrued Liability at July 1, 2012 $(e + f + g)$	\$ 2,044,553,977
2. Actuarial Accrued Liability at July 1, 2012	\$ 2,034,485,171
3. Actuarial Liability Gain/(Loss) (1h – 2)	\$ 10,068,806
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at July 1, 2011	\$ 1,822,702,000
b. Contributions Made for Plan Year Ending June 30, 2012	81,101,000
c. Benefit Payments and Expenses for Plan Year Ending June 30, 2012	116,175,000
d. Interest on a + b - c to End of Year	135,387,375
e. Expected Actuarial Value of Assets at	
July 1, 2012 $(a + b - c + d)$	\$ 1,923,015,375
5. Actuarial Value of Assets as of July 1, 2012	\$ 1,834,170,000
6. Actuarial Asset Gain/(Loss) (5 - 4e)	\$ (88,845,375)
7. Actuarial Gain/(Loss) $(3 + 6)$	\$ (78,776,569)

SECTION 1.5 Page 11

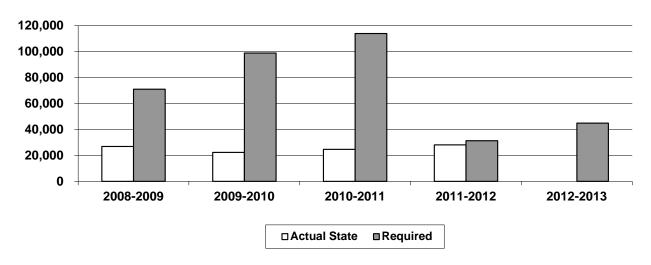
CONTRIBUTIONS

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.

SECTION 1.6 Page 12

TEN-YEAR PROJECTED CASH FLOW (RETIREMENT BENEFIT PAYMENTS)

Plan Year Ending	Actives	Retirees (1)	Total
6/30/2013	\$ 82,154,929	\$ 101,759,780	\$ 183,914,709
6/30/2014	\$ 47,707,921	\$ 92,154,051	\$ 139,861,972
6/30/2015	\$ 57,329,365	\$ 91,651,116	\$ 148,980,481
6/30/2016	\$ 62,719,531	\$ 91,007,113	\$ 153,726,644
6/30/2017	\$ 60,778,478	\$ 90,294,754	\$ 151,073,232
6/30/2018	\$ 67,899,352	\$ 89,382,911	\$ 157,282,263
6/30/2019	\$ 73,375,184	\$ 88,322,125	\$ 161,697,309
6/30/2020	\$ 83,840,661	\$ 87,113,907	\$ 170,954,568
6/30/2021	\$ 90,353,378	\$ 85,858,006	\$ 176,211,384
6/30/2022	\$ 93,542,673	\$ 84,523,045	\$ 178,065,717

⁽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, 2012	July 1, 2011
Vested Benefits		
a. Active Members	\$ 759,517,646	\$ 741,669,479
b. Deferred Option Plan Members	22,818,369	35,535,983
c. Terminated Members	21,409,764	18,155,036
d. Members Receiving Benefits	983,507,261	944,081,922
e. Total Vested Benefits	\$ 1,787,253,040	\$ 1,739,442,420
Non-vested Benefits	95,064,126	86,344,425
Total Accumulated System Benefits	\$ 1,882,317,166	\$ 1,825,786,845
Assumed Rate of Interest	7.5%	7.5%
Market Value of Assets Available for Benefits	\$ 1,784,760,000	\$ 1,811,460,000
Funded Ratio	94.8%	99.2%

Number of Members	July 1, 2012	July 1, 2011
Vested Members		
a. Active Members	2,364	2,411
b. Deferred Option Plan Members	37	50
c. Members with Deferred Benefits	126	124
d. Members Receiving Benefits	3,148	3,060
e. Total Vested Members	5,675	5,645
Non-vested Members	2,737	2,540
Total Members	8,412	8,185

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, 2011	\$ 1,825,786,845
Increase/(Decrease) During Year Attributable to:	
a. Normal Cost	45,606,641
b. Increase for Interest Due to Decrease in Discount Period	136,071,149
c. Benefits Paid, Including Refund of Contributions	(114,223,000)
d. System Amendment	0
e. Assumption Changes	0
f. (Gains)/Losses	(10,924,469)
Net Increase/(Decrease)	56,530,321
Actuarial Present Value of Accumulated System Benefits as of	
July 1, 2012	\$ 1,882,317,166

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)
07/01/2003	\$ 1,392,043,000	\$ 1,646,979,675	\$ 254,936,675	84.5%	\$ 170,507,025	149.5%
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%

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:

	Annual Required	
Year Ended June 30	Contribution	Percentage Contributed
2003	\$ 71,704,935	61.6%
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%

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.

- Section 3.1 Summary of Assets
- Section 3.2 Reconciliation of Assets
- Section 3.3 Actuarial Value of Assets
- **Section 3.4** Average Annual Rates of Investment Return

SUMMARY OF ASSETS

Asset Category	Market Value as of June 30, 2012	Market Value as of June 30, 2011
1. Cash and Short-term Investments	\$ 47,146,000	\$ 33,516,000
2. Receivables		
a. Interest and Dividends	\$ 3,157,000	\$ 2,973,000
b. Member Contributions	954,000	893,000
c. Employer Contributions	1,529,000	1,472,000
d. Insurance Premium Tax	5,520,000	5,526,000
e. Investments Sold	4,349,000	0
f. Other Receivables	0	3,000
g. Total	\$ 15,509,000	\$ 10,867,000
3. Investments at Fair Value		
a. Domestic Government Bonds	\$ 18,418,000	\$ 14,121,000
b. International Government Bonds	0	0
c. Corporate Bonds (1)	344,515,000	330,503,000
d. Domestic Stock	441,609,000	533,850,000
e. International Stock	205,997,000	185,952,000
f. Other	715,669,000	707,163,000
g. Securities Lending Short-Term Pool	26,729,000	44,578,000
h. Total	\$ 1,752,937,000	\$ 1,816,167,000
4. Assets used in System Operations		
a. Furniture, Fixtures and Equipment	\$ 710,000	\$ 913,000
5. Total Assets	\$ 1,816,302,000	\$ 1,861,463,000
6. Liabilities		
a. Payable for Investments Purchased	\$ 3,599,000	\$ 3,753,000
b. Accounts Payable and Accrued Expenses	1,214,000	1,672,000
c. Securities Lending Collateral Payable	26,729,000	44,578,000
d. Total Liabilities	31,542,000	50,003,000
7. Net Assets for Pension Benefits	\$ 1,784,760,000	\$ 1,811,460,000

⁽¹⁾ Includes Domestic and International Bonds

RECONCILIATION OF ASSETS

Transactions	June 30, 2012	June 30, 2011
Additions	-	
1. Contributions		
a. Contributions from Employers	\$ 32,896,000	\$ 31,846,000
b. Contributions from System Members	20,113,000	19,489,000
c. Insurance Premium Tax	28,092,000	24,645,000
d. Total	\$ 81,101,000	\$ 75,980,000
2. Net Investment Income		
a. Interest	\$ 7,547,000	\$ 7,365,000
b. Dividends	10,318,000	9,662,000
c. Realized Gain and Unrealized Appreciation	1,676,000	276,186,000
d. Income from Securities Lending	54,000	60,000
e. Other	590,000	732,000
f. Total	\$ 20,185,000	\$ 294,005,000
g. Investment Expense	(11,811,000)	(11,700,000)
h. Net Investment Income	\$ 8,374,000	\$ 282,305,000
3. Total Additions	\$ 89,475,000	\$ 358,285,000
Deductions		
4. Retirement Benefits	\$ (112,653,000)	\$ (101,737,000)
5. Refund of Contributions	\$ (1,570,000)	\$ (2,117,000)
6. Administrative Expenses	\$ (1,952,000)	\$ (1,712,000)
7. Total Deductions	\$ (116,175,000)	\$ (105,566,000)
8. Net Increase	\$ (26,700,000)	\$ 252,719,000
9. Net Assets Held in Trust for Pension Benefits		
a. Beginning of Year	\$1,811,460,000	\$1,558,741,000
b. End of Year	\$1,784,760,000	\$1,811,460,000
Reconciliation of Actuarial Asset Value and Market Valu	e	
Actuarial Asset Value	\$ 1,834,170,000	\$ 1,822,702,000
Deferred Gain/(Loss)	\$ (49,410,000)	\$ (11,242,000)
Impact of Market Value Corridor	\$ 0	\$ 0
Market Value	\$ 1,784,760,000	\$ 1,811,460,000

ACTUARIAL VALUE OF ASSETS

Schedule of Assets Gains/(Losses)						
Year	Original Amount	Recognized in Prior Years	Recognized This Year	Recognized in Future Years		
2007/2008	\$ (164,696,917)	\$ (131,757,533)	\$ (32,939,384)	\$ 0		
2008/2009	(414,206,995)	(248,524,197)	(82,841,399)	(82,841,399)		
2009/2010	109,851,050	43,940,420	21,970,210	43,940,420		
2010/2011	151,836,917	30,367,383	30,367,383	91,102,151		
2011/2012	(127,013,357)	0	(25,402,671)	(101,610,686)		
Total	\$ (444,229,302)	\$ (305,973,927)	\$ (88,845,861)	\$ (49,409,514)		

Development of Actuarial Value of Assets	
1. Actuarial Value as of July 1, 2011	\$ 1,822,702,000
2. Contributions	
a. Member	\$ 20,113,000
b. Employer	32,896,000
c. Insurance tax	28,092,000
d. Total $(a + b + c)$	\$ 81,101,000
3. Decreases During the Year	
a. Benefit Payments	\$ 112,653,000
b. Return of Member Contributions	1,570,000
c. Non-investment Expenses	1,952,000
d. Total $(a + b + c)$	\$ 116,175,000
4. Expected Return at 7.5% on:	
a. Item 1	\$ 136,702,650
b. Item 2 (one-half year)	3,041,288
c. Item 3 (one-half year)	4,356,563
d. Total $(a + b - c)$	\$ 135,387,375
5. Expected Actuarial Value of Assets June 30, 2012 (1 + 2 - 3 + 4)	\$ 1,923,015,375
6. Unrecognized Asset Gain/(Loss) as of June 30, 2011	\$ (11,242,018)
7. Expected Actuarial Value June 30, 2012 plus previous year's Unrecognized Asset Go (5 + 6)	ain \$ 1,911,773,357
8. Market Value as of June 30, 2012	\$ 1,784,760,000
9. 2011/2012 Asset Gain/(Loss) (8 - 7)	\$ (127,013,357)
10. Asset Gain/(Loss) to be Recognized as of June 30, 2012	\$ (88,845,861)
11. Initial Actuarial Value July 1, 2012 (5 + 10) (Rounded to \$1,000's)	\$ 1,834,170,000
12. Constraining Values:	
a. 80% of Market Value (8 x 0.8)	\$ 1,427,808,000
b. 120% of Market Value (8 x 1.2)	\$ 2,141,712,000
13. Actuarial Value July 1, 2012 (11), but no less than (12a), nor greater than (12b)	\$ 1,834,170,000

SECTION 3.4 Page 22

AVERAGE ANNUAL RATES OF INVESTMENT RETURN

Year Ending	Actuari	al Value	Marke	et Value
June 30	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%

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			In	active Membe	ers		
	Regular	Deferred Option Plan	Refund Due to Member	Deferred Vested Members	Retired Members	Disabled Members	Bene- ficiaries	Total
As of July 1, 2011	4,368	50	583	124	2,292	137	631	8,185
Deferred Option Plan Retirees	(10)	10	0	0	0	0	0	0
Age Retirements	(87)	(22)	0	(10)	119	0	0	0
Disability Retirements	(1)	0	0	0	0	1	0	0
Deaths Without Beneficiaries	(1)	(1)	0	0	(19)	(3)	(25)	(49)
Deaths With Beneficiaries	(2)	0	0	0	(24)	(1)	27	0
Vested Terminations	(28)	0	0	28	0	0	0	0
Rehires	20	0	(9)	0	0	0	0	11
Expiration of Benefits	0	0	0	0	0	0	(1)	(1)
Termination Without Refund	(72)	0	72	0	0	0	0	0
Terminations Electing a Refund	(105)	0	(42)	0	0	0	0	(147)
Alternate Payee of a Qualified Domestic Relations Order	0	0	0	0	0	0	13	13
Data Corrections	0	0	22	(16)	0	4	(3)	7
Transfers Out	0	0	0	0	0	0	0	0
Transfers In	0	0	0	0	0	0	0	0
Net Change	(286)	(13)	43	2	76	1	11	(166)
New Entrants During the Year	359	0	34	0	0	0	0	393
As of July 1, 2012	4,441	37	660	126	2,368	138	642	8,412

SYSTEM MEMBERS (CONTINUED)

B. Count of Active Members

					Years of	f 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	111									111
25-29	475	87								562
30-34	302	352	68							722
35-39	175	211	362	59						807
40-44	118	142	239	305	74					878
45-49	37	41	94	162	323	50				707
50-54	3	21	35	78	126	144	49			456
55-59	1		10	22	31	27	54	6		151
60-64	1		2	9	9	8	11	3	1	44
65-69					1		2			3
70-74										0
75+										0
Total	1,223	854	810	635	564	229	116	9	1	4,441

C. Average Compensation

					Years o	f 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	37,735									37,735
25-29	42,057	53,458								43,822
30-34	41,746	53,970	62,516							49,662
35-39	41,255	54,350	64,482	68,592						57,097
40-44	39,294	50,006	64,331	71,738	78,324					62,402
45-49	37,068	51,679	60,310	67,555	78,167	80,938				69,870
50-54	43,663	49,189	60,157	67,026	73,589	82,470	84,217			74,061
55-59	39,199		53,482	60,890	67,627	77,956	87,135	95,352		75,445
60-64	29,689		54,608	56,318	75,714	74,310	77,186	95,665	85,148	71,429
65-69					91,226		97,345			95,305
70-74										0
75+										0
Total	41,047	53,125	63,441	69,205	76,570	81,318	85,135	95,456	85,148	59,340

SYSTEM MEMBERS (CONTINUED)

D. Members in Pay Status - Annual Benefits

Attained	Retir	ed Members	Ber	neficiaries	_	Disabled Iembers	Currer	nt Payment Total
Age	No.	Benefit	No.	Benefit	No.	Benefit	No.	Benefit
Under 50	102	\$ 3,274,344	50	\$ 851,626	28	321,438	180	\$ 4,447,408
50-54	267	7,521,367	38	623,864	12	155,497	317	8,300,728
55-59	458	13,649,963	76	1,628,394	24	304,748	558	15,583,105
60-64	554	17,148,266	84	1,721,549	23	305,676	661	19,175,491
65-69	444	13,521,275	83	2,281,954	12	233,554	539	16,036,783
70-74	272	8,326,609	78	2,278,935	16	351,723	366	10,957,267
75-79	149	4,674,263	69	2,245,993	12	344,733	230	7,264,989
80-84	79	2,694,219	88	2,827,799	7	218,935	174	4,740,953
85-89	34	1,074,944	50	1,524,123	3	81,282	87	2,681,349
90+	9	271,872	26	714,434	1	23,403	36	1,009,709
Total	2,368	\$ 72,158,122	642	\$16,698,671	138	\$2,340,989	3,148	\$91,197,782

SYSTEM MEMBERS (CONTINUED)

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

Attained Age	Terminate	ed Vested Members	Deferred O	ption Plan Members
Attained Age	No.	Benefit	No.	Benefit
Under 40	21	\$ 283,530	0	0
40-44	31	465,151	1	25,886
45-49	39	736,441	6	224,063
50-54	16	236,802	10	363,090
55-59	14	268,266	13	489,066
60-64	5	136,678	6	159,840
65+	0	0	1	27,885
Total	126	\$ 2,126,868	37	\$ 1,289,830

SYSTEM MEMBERS (CONTINUED)

F. Member Statistics

Inactive Members as of July 1, 2012	Number	Amount of Annual Benefi		
Members Receiving Benefits		-		
a. Retired	2,368	\$	72,158,122	
b. Beneficiaries	642		16,698,671	
c. Disabled	138		2,340,989	
Total	3,148	\$	91,197,782	
		_		
Terminated Vested	126	\$	2,126,868	
Deferred Option Plan Members	37	\$	1,289,830	
Terminated Members with Refunds Due	660		N/A	

Statistics for Active	Number	Average			
Members	Number	Age	Service]	Earnings
As of July 1, 2011					
a. Continuing	4,008	40.4	12.9	\$	59,915
b. New	360	30.7	2.3		38,470
Total	4,368	39.6	12.0	\$	58,148
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

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, 2002 through June 30, 2007.

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 %
1	3.0	16.00	19.00
2	3.0	12.00	15.00
3	3.0	6.75	9.75
4	3.0	6.25	9.25
5	3.0	5.75	8.75
6	3.0	5.50	8.50
7	3.0	5.00	8.00
8	3.0	4.25	7.25
9	3.0	4.10	7.10
10	3.0	3.90	6.90
15	3.0	2.90	5.90
20	3.0	2.00	5.00

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	25
21	10
22	10
23	15
24	20
25	30
26	15
27	15
28	15
29	25
30	100

2. Mortality Rates

(a) Active employees RP-2000 Healthy (pre-retirement) Employees (Fully generational using Scale AA)

(b) Active employees RP-2000 Blue Collar Healthy (post-retirement and nondisabled pensioners) RP-2000 Blue Collar Healthy Annuitant (Fully generational using Scale AA) with age set back one year

(c) Disabled pensioners RP-2000 Blue Collar Healthy Annuitant with age set forward 7 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	.0004
30-34	.0008
35-39	.0008
40-44	.0012
45-49	.0012
50-54	.0012
55-59	.0012

4. Withdrawal Rates

Graduated rates by years of service. See table below:

Service Range	Annual Rate
0	.150
1	.120
2	.085
3	.070
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)

Other Assumptions

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 $2 \frac{1}{2}\%$ 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% to 74% 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 Plan effective original became during the July 1, 1990 to June 30, 1991 Plan Year with the back-drop and Payout Account provisions added subsequently. 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.