

***Oklahoma Police Pension
and Retirement System
Actuarial Valuation Report as of
July 1, 2002***

**BUCK
CONSULTANTS**
1200 17th Street
Suite 1200
Denver, CO 80202
(720) 359-7700

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HIGHLIGHTS - PURPOSE

This report has been prepared by Buck Consultants, Inc. 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, 2002;
- Review experience under the System for the year ended June 30, 2002; 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, 2002	July 1, 2001
Accrued Liability	\$ 1,554.3	\$ 1,443.4
Actuarial Value of Assets	\$ 1,370.0	\$ 1,319.0
Unfunded Accrued Liability	\$ 184.3	\$ 124.4
Funded Ratio	88.1%	91.4%

- The funded ratio on a SFAS No. 35 basis, measuring the market value of System assets versus the present value of benefits accrued as of the valuation date, decreased from 116.8% to 102.3%.
- The required state contribution for the System increased from \$33.7 million to \$49.6 million.

Contribution Summary (\$000,000)	July 1, 2002	July 1, 2001
Total Required Contribution	\$ 84.5	\$ 67.2
Expected Employee Contributions	12.8	12.3
Expected Municipality Contributions	22.1	21.2
Required State Contribution	\$ 49.6	\$ 33.7
--As a Percentage of Payroll	30.9%	22.0%

HIGHLIGHTS - SUMMARY OF PRINCIPAL VALUATION RESULTS

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 in the section titled "Effects of Changes."

	Actuarial Valuation as of		Change Between Years	
	July 1, 2002	July 1, 2001	Amount	Percent
Summary of Costs				
Required State Contribution for Current Year	\$ 49,594,364	\$ 33,735,540	\$ 15,858,824	47.0%
Actual State Contribution Received in Prior Year	\$ 19,811,000	\$ 18,638,000	\$ 1,173,000	6.3%

GASB No. 25 Funded Status				
Actuarial Accrued Liability	\$ 1,554,288,324	\$ 1,443,404,052	\$ 110,884,272	7.7%
Actuarial Value of Assets	\$ 1,370,024,000	\$ 1,319,041,000	\$ 50,983,000	3.9%
Unfunded Actuarial Accrued Liability	\$ 184,264,324	\$ 124,363,052	\$ 59,901,272	48.2%

Market Value of Assets and Additional Liabilities				
Market Value of Assets	\$ 1,156,636,000	\$ 1,238,761,000	\$ (82,125,000)	(6.6%)
Actuarial Present Value of Accumulated System Benefits (SFAS No. 35)	\$ 1,130,458,980	\$ 1,060,529,473	\$ 69,929,507	6.6%
Present Value of Projected System Benefits	\$ 1,964,379,002	\$ 1,838,982,147	\$ 125,396,855	6.8%

Summary of Data				
Number of Members in Valuation				
Active Paid Members	3,836	3,816	20	0.5%
Members with Deferred Benefits	52	55	(3)	(5.5%)
Retired Members	1,649	1,556	93	6.0%
Beneficiaries	403	412	(9)	(2.2%)
Disabled Members	153	151	2	1.3%
Deferred Option Plan Members	361	366	(5)	(1.4%)
Total	6,454	6,356	98	1.5%

Active Member Statistics				
Total Annual Compensation ⁽¹⁾	\$ 160,419,776	\$ 153,350,395	\$ 7,069,381	4.6%
Average Compensation ⁽¹⁾	\$ 41,820	\$ 40,186	\$ 1,633	4.1%
Average Age	36.7	36.5	0.2	0.5%
Average Service	9.2	9.1	0.1	1.1%

⁽¹⁾ Compensation is projected one year based on the salary increase assumptions.

HIGHLIGHTS - EFFECTS OF CHANGES

Changes in Plan Provisions

As of July 1, 2002, a 5.0% ad hoc cost-of-living increase was granted for those participants receiving benefits as of June 30, 2000. This increase was offset by automatic cost-of-living increases granted after June 30, 2000. The 5% COLA increased liabilities by \$24.1M. However, the COLA reserve grew to \$22.8M as of July 1, 2002 and, therefore, the additional cost of the COLA that was not reflected in the reserve was \$1.3M.

HIGHLIGHTS - EFFECTS OF CHANGES (CONTINUED)

Changes in System Benefits

The following Legislation affecting the Oklahoma Police Pension and Retirement System became effective July 1, 2002.

- | | |
|---------|---|
| SB 510 | Modifies the definition of duty-related disability benefits and deletes certain percentages of impairment related to permanent and partial disabilities. |
| HB 1719 | Prescribes requirements and actuarial assumptions to be used in reporting the financial and actuarial condition of the System on a standardized basis and that the information should be contained in an appendix or addendum to the annual valuation report. |
| HB 2124 | Provides an ad hoc 5% cost-of-living increase for members receiving benefits as of June 30, 2001. This increase is offset by any automatic increases received since June 30, 2000. |
| HB 2383 | Provides that the \$5,000 death benefit shall be deemed, for purposes of federal income taxation, as life insurance proceeds. |

There was no actuarial impact due to bills SB 510 and HB 2383. Please see page 3 for the impact due to HB 2124 and see the addendum to this report for a summary of the valuation results under the basis prescribed by HB 1719.

HIGHLIGHTS - EFFECTS OF CHANGES (CONTINUED)

Actuarial Experience During the Plan Year

The System experienced the following losses during the year ending June 30, 2002. These amounts are developed in Section 1.3 of this report:

	Millions
Liability Loss	\$ (12.9)
Asset Loss	\$ (34.2)
Total Loss	\$ (47.1)

HIGHLIGHTS - DEFERRED OPTION PLAN

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 Deferred Option Plan 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 Deferred Option Plan. In addition, the monthly retirement benefits are paid into the employees' account in the Deferred Option Plan.

The Deferred Option Plan 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 accrual rate credited for the fiscal year ended June 30, 2002, was 7.5%. The assets and liabilities reflected in these results as of July 1, 2002, 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, 2002	July 1, 2001
Number of DOP Members	361	366
DOP Account Balances	\$ 28.3M	\$ 28.7M
Annual Retirement Benefits of DOP Members	\$ 10.8M	\$ 10.1M

HIGHLIGHTS - CERTIFICATION

We have prepared an actuarial valuation of the Oklahoma Police Pension and Retirement System as of July 1, 2002, for the plan year ending June 30, 2003. 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, 2002.

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.

All costs, liabilities and other factors under the System were determined in accordance with generally accepted actuarial principles and procedures, in accordance with the provisions of current State Statutes and regulations issued thereunder, using an actuarial cost method which we believe is appropriate. In our opinion, the actuarial assumptions are reasonable and represent our best estimate of the anticipated experience under the System. This report fully and fairly discloses the actuarial position of the System on an ongoing basis.

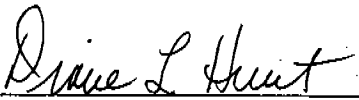
There have been no changes in actuarial methods or assumptions. The changes in benefit provisions since the last valuation of the System as of July 1, 2001 are summarized on page 4 and the financial impact, if any, are incorporated in this report.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.



William B. Fornia, FSA, MAAA

September 17, 2002



Diane L. Hunt, FSA, MAAA

September 17, 2002

Buck Consultants
1200 17th St. #1200
Denver, CO 80202
720-359-7700

SECTION 1: FUNDING RESULTS

Section 1.1 Comparative Summary of Principal Valuation Results

Section 1.2 Unfunded Actuarial Accrued Liability

Section 1.3 Actuarial Gain/(Loss)

Section 1.4 Normal Cost

Section 1.5 Contributions

Section 1.6 Ten-Year Projected Cash Flow

Section 1.7 Liability Detail

SECTION 1.1

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

A. Summary of Data	Actuarial Valuation as of		Percent Change
	July 1, 2002	July 1, 2001	
1. Active Members			
a. Number	3,836	3,816	0.5%
b. Annual Compensation	\$ 160,419,776	\$ 153,350,395	4.6%
c. Average Annual Compensation	\$ 41,820	\$ 40,186	4.1%
d. Average Age	36.7	36.5	0.5%
e. Average Service	9.2	9.1	1.1%
2. Vested Terminated Members			
a. Number	52	55	(5.5%)
b. Annual Deferred Benefits	\$ 603,298	\$ 615,542	(2.0%)
c. Average Annual Deferred Benefit	\$ 11,602	\$ 11,192	3.7%
3. Retired Members			
a. Number	1,649	1,556	6.0%
b. Annual Retirement Benefits	\$ 41,476,732	\$ 37,515,586	10.6%
c. Average Annual Retirement Benefit	\$ 25,153	\$ 24,110	4.3%
4. Beneficiaries			
a. Number	403	412	(2.2%)
b. Annual Retirement Benefits	\$ 8,935,756	\$ 8,744,277	2.2%
c. Average Annual Retirement Benefit	\$ 22,173	\$ 21,224	4.5%
5. Disabled Members			
a. Number	153	151	1.3%
b. Annual Retirement Benefits	\$ 2,386,672	\$ 2,338,080	2.1%
c. Average Annual Retirement Benefit	\$ 15,599	\$ 15,484	0.7%
6. Deferred Option Plan Members			
a. Number	361	366	(1.4%)
b. Annual Retirement Benefits	\$ 10,757,484	\$ 10,104,367	6.5%
c. Average Annual Retirement Benefit	\$ 29,799	\$ 27,608	7.9%
d. Annual Compensation	\$ 19,323,077	\$ 19,184,615	0.7%
e. Total Account Balances	\$ 28,344,000	\$ 28,715,000	(1.3%)
7. Total Members Included in Valuation	6,454	6,356	1.5%

SECTION 1.1

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (CONTINUED)

B. Summary of Assets, Liabilities and Funded Status	Actuarial Valuation as of		Percent Change
	July 1, 2002	July 1, 2001	
1. System Assets on Valuation Date			
a. Actuarial Value	\$ 1,370,024,000	\$ 1,319,041,000	3.9%
b. Market Value	\$ 1,156,636,000	\$ 1,238,761,000	(6.6%)
2. Actuarial Accrued Liability ⁽¹⁾	\$ 1,554,288,324	\$ 1,443,404,052	7.7%
a. Funded Ratio – Actuarial Value ⁽¹⁾	88.1%	91.4%	(3.5%)
b. Funded Ratio - Market Value	74.4%	85.8%	(13.3%)
3. Unfunded Actuarial Accrued Liability (based on Actuarial Value of Assets)	\$ 184,264,324	\$ 124,363,052	48.2%
4. Present Value of Accrued Benefits (SFAS No. 35)	\$ 1,130,458,980	\$ 1,060,529,473	6.6%
a. Funded Ratio - Actuarial Value	121.2%	124.4%	(2.6%)
b. Funded Ratio – Market Value	102.3%	116.8%	(12.4%)
5. Present Value of Projected Benefits	\$ 1,964,379,002	\$ 1,838,982,147	6.8%

⁽¹⁾ GASB No. 25 Basis

SECTION 1.1

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (CONTINUED)

C. Summary of Contribution Requirements	Actuarial Valuation as of				Percent Change
	July 1, 2002		July 1, 2001		
	Amount	% of Active Covered Comp.	Amount	% of Active Covered Comp.	
1. Annual Covered Compensation for Members Included in Valuation					
a. Active Members	\$ 160,419,776	N/A	\$ 153,350,395	N/A	4.6%
b. Deferred Option Plan Members	19,323,077	N/A	19,184,615	N/A	0.7%
c. Total	\$ 179,742,853	N/A	\$ 172,535,010	N/A	4.2%
2. Total Normal Cost Mid-year	\$ 44,595,933	27.8%	\$ 42,618,092	27.8%	4.6%
3. Unfunded Actuarial Accrued Liability	\$ 184,264,324	N/A	\$ 124,363,052	N/A	48.2%
4. Amortization of Unfunded Actuarial Accrued Liability over 20 years From July 1, 1988 Mid-year ⁽¹⁾	\$ 37,887,158	23.6%	\$ 22,660,721	14.8%	67.2%
5. Budgeted Expenses	\$ 2,055,426	1.3%	\$ 1,907,310	1.2%	7.8%
6. Total Required Contribution (2 + 4 + 5)	\$ 84,538,517	52.7%	\$ 67,186,123	43.8%	25.8%
7. Estimated Employee Contribution (8% x 1a)	\$ 12,833,582	8.0%	\$ 12,268,032	8.0%	4.6%
8. Estimated Municipality Contributions					
a. Active Members	\$ 20,854,571	13.0%	\$ 19,935,551	13.0%	4.6%
b. Deferred Option Plan Members	1,256,000	6.5% ⁽²⁾	1,247,000	6.5% ⁽²⁾	0.7%
c. Total	\$ 22,110,571	12.3% ⁽³⁾	\$ 21,182,551	12.3% ⁽³⁾	4.4%
9. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 20 years from July 1, 1988 at Mid-year. (6 - 7 - 8c)	\$ 49,594,364	30.9%	\$ 33,735,540	22.0%	47.0%
10. Previous year's actual State Contribution	\$ 19,811,000	12.9% ⁽⁴⁾	\$ 18,638,000	12.5% ⁽⁴⁾	6.3%
11. Approximate period over which previous year's State Contribution will amortize Current Unfunded Actuarial Accrued Liability from July 1, 1988.	Not sufficient to amortize UAAL	N/A	Not sufficient to amortize UAAL	N/A	N/A

⁽¹⁾ Funding Policy adopted by Board.

⁽²⁾ Percentage of Deferred Option Plan Members' compensation.

⁽³⁾ Percent of total compensation.

⁽⁴⁾ Percent of previous years' annual compensation for active members.

SECTION 1.2

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, 2002	July 1, 2001
1. Actuarial Present Value of Benefits		
a. Active Members	\$ 1,027,841,078	\$ 959,375,607
b. Members with Deferred Benefits	6,203,422	6,556,965
c. Members Receiving Benefits who are not eligible for Automatic COLA	505,998,291	443,981,370
d. Members Receiving Benefits who are eligible for Automatic COLA	223,263,908	227,920,219
e. Deferred Option Plan Members	201,072,303	190,715,316
f. COLA Reserve	0	10,432,670
g. Total	\$ 1,964,379,002	\$ 1,838,982,147
2. Actuarial Present Value of Future Normal Costs	\$ 410,090,678	\$ 395,578,095
3. Total Actuarial Accrued Liability (1g - 2)	\$ 1,554,288,324	\$ 1,443,404,052
4. Actuarial Value of Assets	\$ 1,370,024,000	\$ 1,319,041,000
5. Unfunded Actuarial Accrued Liability (3 - 4, not less than \$0)	\$ 184,264,324	\$ 124,363,052

SECTION 1.3

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, 2002.

	Regular	Deferred Option	Total
1. Expected Actuarial Accrued Liability			
a. Actuarial Accrued Liability at July 1, 2001	\$ 1,414,689,052	\$ 28,715,000	\$ 1,443,404,052
b. Normal Cost or DOP contributions at July 1, 2001	41,077,679	1,256,000	42,333,679
c. Benefit Payments for Plan Year Ending June 30, 2002	62,477,000	3,700,000	66,177,000
d. Interest on a + b - c to End of Year (or actual interest)	106,839,617	2,073,000	108,912,617
e. Expected Increase in COLA Reserve after Interest Increase	11,606,244	0	11,606,244
f. Expected Actuarial Accrued Liability Before Changes (a + b - c + d + e)	\$ 1,511,735,592	\$ 28,344,000	\$ 1,540,079,592
g. Changes in actuarial Accrued Liability at July 1, 2002 due to changes in Actuarial Assumptions	0	0	0
h. Change in Actuarial Accrued Liability at July 1, 2002 due to changes in System Provisions	1,256,272	0	1,256,272
i. Expected Actuarial Accrued Liability at July 1, 2002 (f + g + h)	\$ 1,512,991,864	\$ 28,344,000	\$ 1,541,335,864
2. Actuarial Accrued Liability at July 1, 2002	\$ 1,525,944,324	\$ 28,344,000	\$ 1,554,288,324
3. Actuarial Liability Gain/(Loss) (1i - 2)	\$ (12,952,460)	\$ 0	\$ (12,952,460)
4. Expected Actuarial Value of Assets			
a. Actuarial Value of Assets at July 1, 2001	\$ 1,290,326,000	\$ 28,715,000	\$ 1,319,041,000
b. Contributions Made for Plan Year Ending June 30, 2002	53,333,000	1,256,000	54,589,000
c. Benefit Payments and Expenses for Plan Year Ending June 30, 2002	(64,157,000)	3,700,000	67,857,000
d. Interest on a + b - c to End of Year (or actual interest)	96,368,550	2,073,000	98,441,550
e. Expected Actuarial Value of Assets at July 1, 2002 (a + b - c + d)	\$ 1,375,870,550	\$ 28,344,000	\$ 1,404,214,550
5. Actuarial Value of Assets as of July 1, 2002	\$ 1,341,680,000	\$ 28,344,000	\$ 1,370,024,000
6. Actuarial Asset Gain/(Loss) (5 - 4e)	\$ (34,190,550)	\$ 0	\$ (34,190,550)
7. Actuarial Gain/(Loss) (3 + 6)	\$ (47,143,010)	\$ 0	\$ (47,143,010)

SECTION 1.3

ACTUARIAL GAIN/(LOSS) (CONTINUED)

COLA Reserve	
1. Reserve as of July 1, 2001	\$ 10,432,670
2. Interest at 7.5%	782,450
3. Liability for Inactive Members Not Eligible for COLA (See Section 1.7, Item 2.(h) without 2% COLA)	580,312,223
4. Reserve Increment (2% x 3.)	11,606,244
5. Expected Reserve as of July 1, 2002	22,821,364
6. Ad Hoc cost of living increase	24,077,636
7. Actual Reserve (5. Less 6., not less than \$0), as of July 1, 2002	0

SECTION 1.4

NORMAL COST

The components of normal cost under the System's funding method are:

Component	July 1, 2002	July 1, 2001
Retirement Benefits	\$ 38,006,748	\$ 36,271,702
Withdrawal Benefits	3,203,613	3,087,591
Disability Benefits	574,511	552,159
Death Benefits	1,199,160	1,166,227
Total Normal Cost at Beginning of Year	\$ 42,984,032	\$ 41,077,679
Total Normal Cost at Mid-year	\$ 44,595,933	\$ 42,618,092
Annual Covered Payroll	\$ 160,419,776	\$ 153,350,395
Normal Cost Rate At Mid-year	27.79%	27.86%

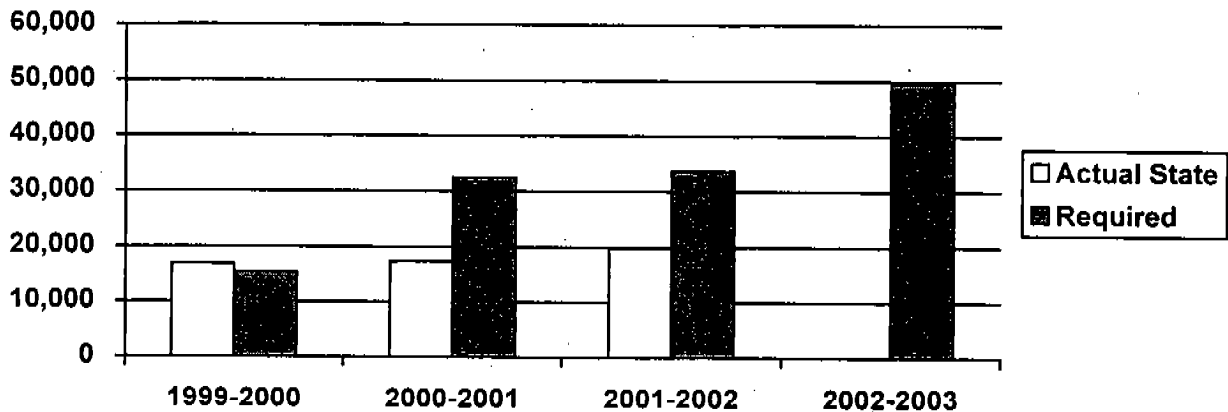
SECTION 1.5

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 Deferred Option Plan Members do not make employee contributions to the plan. However, municipalities continue contributing for them, with 50% of the contribution going into the Retirement System fund and 50% going into the Deferred Option account.

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



SECTION 1.6

TEN-YEAR PROJECTED CASH FLOW (RETIREMENT BENEFIT PAYMENTS)

Plan Year Ending	Actives	Retirees ⁽¹⁾	Total
6/30/2003	\$ 3,512,880	\$ 64,074,693	\$ 67,587,573
6/30/2004	\$ 7,477,688	\$ 64,216,707	\$ 71,694,395
6/30/2005	\$ 11,253,112	\$ 64,333,935	\$ 75,587,047
6/30/2006	\$ 15,200,266	\$ 64,407,946	\$ 79,608,212
6/30/2007	\$ 19,147,899	\$ 64,393,386	\$ 83,541,285
6/30/2008	\$ 23,042,749	\$ 64,409,937	\$ 87,452,686
6/30/2009	\$ 27,085,309	\$ 64,388,147	\$ 91,473,456
6/30/2010	\$ 31,636,172	\$ 64,251,099	\$ 95,887,271
6/30/2011	\$ 37,033,704	\$ 64,075,233	\$ 101,108,937
6/30/2012	\$ 42,615,917	\$ 63,826,263	\$ 106,442,180

(1) Includes Deferred Option Plan Members, Disabled Members, Beneficiaries and Terminated Vested Members.

SECTION 1.7

LIABILITY DETAIL

Total	Without 2% COLA	With 2% Auto COLA
Present Value of Benefits	\$ 1,385,234,906	\$ 1,964,379,002
Accrued Liability	\$ 1,291,873,515	\$ 1,554,288,324
Normal Cost Mid-Year	\$ 35,512,037	\$ 44,595,933

Active		
a. Retirement	\$ 483,654,845	\$ 601,756,479
b. Disability	648,554	654,708
c. Withdrawal	8,908,446	10,534,396
d. Death	905,897	10,625,175
e. Refunds	(5,820,358)	(5,820,358)
f. Total	\$ 488,297,384	\$ 617,750,400
Inactive		
1. Members Eligible for Automatic COLA		
a. Retired Members	\$ 138,114,142	\$ 138,114,142
b. Disabled Members	21,702,628	21,702,628
c. Terminated Vested Members	0	0
d. Deferred Option Plan Members	0	0
e. Beneficiaries	63,447,138	63,447,138
f. Total	\$ 223,263,908	\$ 223,263,908
2. Members Not Eligible for Automatic COLA		
a. Retired Members	\$ 374,803,793	\$ 462,866,855
b. Disabled Members	9,463,258	11,843,081
c. Terminated Vested Members	4,917,568	6,203,422
d. Deferred Option Plan Members - Annuities	137,020,328	172,728,303
e. Deferred Option Plan Members - Account Balances	28,344,000	28,344,000
f. Beneficiaries	25,763,276	31,288,355
g. Reserve for COLA's in Future ⁽¹⁾	N/A	0
h. Total	\$ 580,312,223	\$ 713,274,016
3. Total Inactive (1f + 2h)	\$ 803,576,131	\$ 936,537,924
Accrued Liability (Active + Inactive)	\$ 1,291,873,515	\$ 1,554,288,324

- (1) Ad Hoc cost of living adjustments (COLAs) are prefunded to the 2% per year level in this valuation. These COLAs are granted periodically, but generally not each year. Therefore, in years in which a COLA is not granted, this reserve is increased to fund future COLA's.

SECTION 2: ACCOUNTING RESULTS

Section 2.1 SFAS No. 35 Information

Section 2.2 GASB No. 25 Information

SECTION 2.1

SFAS No. 35 INFORMATION

A. Actuarial Present Value of Accumulated System Benefits

The actuarial present value of vested and nonvested accumulated system benefits was computed on an ongoing system basis in order to provide required information under Financial Accounting Standards Board Statement No. 35. 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, 2002	July 1, 2001
Vested Benefits		
a. Active Members	\$ 266,247,109	\$ 246,391,112
b. Deferred Option Plan Members	165,364,328	157,287,715
c. Members with Deferred Benefits	4,917,568	5,198,636
d. Members Receiving Benefits	633,294,235	587,067,365
e. Total Vested Benefits	\$ 1,069,823,240	\$ 995,944,828
Nonvested Benefits	60,635,740	64,584,645
Total Accumulated System Benefits ⁽¹⁾	\$ 1,130,458,980	\$ 1,060,529,473
Assumed Rate of Interest	7.5%	7.5%
Market Value of Assets Available for Benefits	\$ 1,156,636,000	\$ 1,238,761,000
Funded Ratio	102.3%	116.8%
Change in Accumulated System Benefits due to:		
a. Assumption Changes	\$ 0	\$ (3,774,526)
b. System Provision Changes	\$ 24,077,636	\$ 0

Number of Members	July 1, 2002	July 1, 2001
Vested Members		
a. Active Members	1,755	1,730
b. Deferred Option Plan Members	361	366
c. Members with Deferred Benefits	52	55
d. Members Receiving Benefits	2,205	2,119
e. Total Vested Members	4,373	4,270
Nonvested Members	2,081	2,086
Total Members	6,454	6,356

⁽¹⁾ Assumption of 2% future ad hoc cost-of-living increases is not reflected in this liability. Only System liabilities accrued (and in statute) as of the valuation date are included.

SECTION 2.1

SFAS NO. 35 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, 2001	\$ 1,060,529,473
Increase/(Decrease) During Year Attributable to:	
a. Normal Cost	\$ 37,595,918
b. Increase for Interest Due to Decrease in Discount Period	79,923,892
c. Benefits Paid	(64,947,000)
d. System Amendment	24,077,636
e. Assumption Changes	0
f. (Gains)/Losses	(6,720,939)
Net Increase/(Decrease)	\$ 69,929,507
Actuarial Present Value of Accumulated System Benefits as of July 1, 2002	\$ 1,130,458,980

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.

SECTION 2.2

GASB No. 25 INFORMATION

Supplementary Schedules

The GASB has issued a new statement; 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. The new 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 eight 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)
07/01/1995	\$ 664,495,000	\$ 797,637,263	\$ 133,142,263	83.3%	\$ 112,995,471	117.8%
07/01/1996	\$ 738,547,000	\$ 830,586,623	\$ 92,039,623	88.9%	\$ 114,421,087	80.4%
07/01/1997	\$ 827,787,000	\$ 876,603,889	\$ 48,816,889	94.4%	\$ 122,715,886	39.8%
07/01/1998	\$ 966,907,000	\$ 1,092,443,208	\$ 125,536,208	88.5%	\$ 128,521,087	97.7%
07/01/1999	\$ 1,094,400,000	\$ 1,160,023,416	\$ 65,623,416	94.3%	\$ 139,242,527	47.1%
07/01/2000	\$ 1,222,123,000	\$ 1,354,500,875	\$ 132,377,875	90.2%	\$ 148,543,158	89.1%
07/01/2001	\$ 1,319,041,000	\$ 1,443,404,052	\$ 124,363,052	91.4%	\$ 153,350,395	81.1%
07/01/2002	\$ 1,370,024,000	\$ 1,554,288,324	\$ 184,264,324	88.1%	\$ 160,419,776	114.9%

SECTION 2.2

GASB No. 25 INFORMATION

B. Schedule of Employer Contributions

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

Year Ended June 30	Annual Required Contribution	Percentage Contributed
1995	\$ 31,960,065	90.8%
1996	\$ 30,943,994	101.0%
1997	\$ 26,459,627	124.7%
1998	\$ 22,425,929	158.0%
1999	\$ 39,826,511	90.9%
2000	\$ 34,682,993	108.7%
2001	\$ 53,043,666	75.5%
2002	\$ 54,918,091	76.9%

SECTION 3: SYSTEM ASSETS

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

SECTION 3.1

SUMMARY OF ASSETS

Asset Category	Market Value as of June 30, 2002	Market Value as of June 30, 2001
1. Cash and Short-term Investments		
a. Cash	\$ (261,000)	\$ 2,000
b. Short-term Investments	62,324,000	53,926,000
c. Total	\$ 62,063,000	\$ 53,928,000
2. Receivables		
a. Interest and Dividends	\$ 4,724,000	\$ 4,750,000
b. Member, Employer, and State Contributions	2,392,000	6,801,000
c. Investments Sold	0	0
d. Other Receivables	0	0
e. Total	\$ 7,116,000	\$ 11,551,000
3. Investments at fair value		
a. Government Bonds	\$ 96,054,000	\$ 121,335,000
b. International Government Bonds	26,992,000	27,311,000
c. Corporate Bonds ⁽¹⁾	223,621,000	227,758,000
d. Common Stock	395,766,000	485,354,000
e. International Stock	166,542,000	171,804,000
f. Other	198,050,000	158,699,000
g. Securities Lending Short-term Pool	59,920,000	46,975,000
h. Total	\$ 1,166,945,000	\$ 1,239,236,000
4. Assets used in system operations		
a. Furniture, Fixtures and Equipment	\$ 0	\$ 0
5. Total Assets	\$ 1,236,124,000	\$ 1,304,715,000
6. Liabilities		
a. Payable for Investments Purchased	\$ 18,567,000	\$ 17,976,000
b. Accounts Payable and Accrued Expenses	1,001,000	1,003,000
c. Securities Lending Collateral Payable	59,920,000	46,975,000
d. Total Liabilities	\$ 79,488,000	\$ 65,954,000
7. Net Assets for Pension Benefits	\$ 1,156,636,000	\$ 1,238,761,000

(1) Includes Domestic and International Bonds

SECTION 3.2

RECONCILIATION OF ASSETS

Transactions	June 30, 2002	June 30, 2001
Additions		
1. Contributions		
a. Contributions from Employers	\$ 22,411,000	\$ 21,414,000
b. Contributions from System Members	12,367,000	11,788,000
c. Insurance Premium Tax	19,811,000	18,638,000
d. Total	\$ 54,589,000	\$ 51,840,000
2. Net Investment Income		
a. Interest	\$ 17,554,000	\$ 22,816,000
b. Dividends	7,004,000	7,357,000
c. Realized Gain and Unrealized Appreciation	(86,883,000)	(95,959,000)
d. Income from Securities Lending	270,000	345,000
e. Other	887,000	1,562,000
f. Total	\$ (61,168,000)	\$ (63,879,000)
g. Investment Expense	(7,689,000)	(6,222,000)
h. Net Investment Income	\$ (68,857,000)	\$ (70,101,000)
3. Total Additions	\$ (14,268,000)	\$ (18,261,000)
Deductions		
4. Retirement Benefits	\$ (64,947,000)	\$ (59,871,000)
5. Deferred Option Benefits	\$ 0	\$ 0
6. Refund of Contributions	\$ (1,230,000)	\$ (1,020,000)
7. Administrative Expenses	\$ (1,680,000)	\$ (1,350,000)
8. Total Deductions	\$ (67,857,000)	\$ (62,241,000)
9. Net Increase	\$ (82,125,000)	\$ (80,502,000)
10. Net Assets Held in Trust for Pension Benefits		
a. Beginning of Year	\$ 1,238,761,000	\$ 1,319,263,000
b. End of Year	\$ 1,156,636,000	\$ 1,238,761,000
Reconciliation of Actuarial Asset Value and Market Value		
Actuarial Asset Value	\$ 1,370,024,000	\$ 1,319,041,000
Deferred Gain/(Loss)	\$ (213,388,000)	\$ (80,280,000)
Market Value	\$ 1,156,636,000	\$ 1,238,761,000

SECTION 3.2

RECONCILIATION OF ASSETS ⁽¹⁾ (CONTINUED)

Transactions	Non-Deferred Option Plan Assets	Deferred Option Plan Assets	Total
Additions			
1. Contributions			
a. Contributions from Employers	\$ 21,155,000	\$ 1,256,000	\$ 22,411,000
b. Contributions from System Members	12,367,000	0	12,367,000
c. Insurance Premium Tax	19,811,000	0	19,811,000
d. Total	\$ 53,333,000	\$ 1,256,000	\$ 54,589,000
2. Net Investment Income			
a. Interest	\$ 15,514,000	\$ 2,040,000	\$ 17,554,000
b. Dividends	7,004,000	0	7,004,000
c. Realized Gain and Unrealized Appreciation	(86,883,000)	0	(86,883,000)
d. Income from Security Lending	270,000	0	270,000
e. Other	854,000	33,000	887,000
f. Total	\$ (63,241,000)	\$ 2,073,000	\$ (61,168,000)
g. Investment Expense	(7,689,000)	0	(7,689,000)
h. Net Investment Income	\$ (70,930,000)	\$ 2,073,000	\$ (68,857,000)
3. Total Additions	\$ (17,597,000)	\$ 3,329,000	\$ (14,268,000)
Deductions			
4. Retirement Benefits	\$ (51,106,000)	\$ (13,841,000)	\$ (64,947,000)
5. Deferred Option Benefits Credited to Account	(10,141,000)	10,141,000	0
6. Refund of Contributions	(1,230,000)	0	(1,230,000)
7. Administrative Expenses	(1,680,000)	0	(1,680,000)
8. Total Deductions	\$ (64,157,000)	\$ (3,700,000)	\$ (67,857,000)
9. Net Increase	\$ (81,754,000)	\$ (371,000)	\$ (82,125,000)
10. Net Assets Held in Trust for Pension Benefits			
a. Beginning of Year	\$1,210,046,000	\$ 28,715,000	\$1,238,761,000
b. End of Year	\$1,128,292,000	\$ 28,344,000	\$1,156,636,000

- (1) This allocation of assets is maintained for accounting purposes only. It is our understanding that all assets of the System are available to pay all benefits provided under the System.

SECTION 3.3

ACTUARIAL VALUE OF ASSETS

Schedule of Assets Gains/(Losses)				
Year	Original Amount	Recognized in Prior Years	Recognized This Year	Recognized in Future Years
1997/1998	96,431,854	77,145,484	19,286,370	0
1998/1999	36,234,277	21,740,565	7,246,855	7,246,857
1999/2000	25,028,597	10,011,438	5,005,719	10,011,440
200/2001	(161,346,342)	(32,269,268)	(32,269,268)	(96,807,804)
2001/2002	(167,298,717)	0	(33,459,743)	(133,838,974)
Total	\$ (170,950,331)	\$ 76,628,219	\$ (34,190,067)	\$ (213,388,481)

Development of Actuarial Value of Assets	
1. Actuarial Value as of July 1, 2001 (Excluding DOP)	\$ 1,290,326,000
2. Contributions	
a. Member	\$ 12,367,000
b. Employer (Excluding DOP)	21,155,000
c. Insurance tax	19,811,000
d. Total	\$ 53,333,000
3. Decreases During the Year	
a. Benefit Payments (Excluding payments from DOP, including payments to DOP)	\$ 61,247,000
b. Return of Member Contributions	1,230,000
c. Noninvestment Expenses	1,680,000
d. Total	\$ 64,157,000
4. Expected Return at 7.5% on:	
a. Item 1	\$ 96,774,450
b. Item 2 (one-half year)	1,999,988
c. Item 3 (one-half year)	2,405,888
d. Total	\$ 96,368,550
5. Expected Actuarial Value of Assets (Excluding DOP) June 30, 2002 (1 + 2 + 3 + 4)	\$ 1,375,870,550
6. Unrecognized Asset Gain as of June 30, 2001	\$ (80,279,833)
7. DOP Assets	\$ 28,344,000
8. Expected Actuarial Value June 30, 2002 plus previous year's Unrecognized Asset Gain (5 + 6 + 7)	\$ 1,323,934,717
9. Market Value June 30, 2002	\$ 1,156,636,000
10. 2001/2002 Asset Gain/(Loss) (9 - 8)	\$ (167,298,717)
11. Asset Gain to be Recognized as of June 30, 2002	\$ (34,190,067)
12. Initial Actuarial Value July 1, 2002 (5 + 7 + 11) (Rounded to \$1,000's)	\$ 1,370,024,000
13. Constraining Values:	
a. 80% of Market Value (9 x 0.8)	\$ 925,309,000
b. 120% of Market Value (9 x 1.2)	\$ 1,387,963,000
14. Actuarial Value July 1, 2002 (12), but no less than (13a), nor greater than (13b)	\$ 1,370,024,000

SECTION 3.4

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%

Annual Returns before 1998 exclude DOP assets.

SECTION 4: BASIS OF VALUATION

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

SECTION 4.1

SYSTEM MEMBERS

A. Member Data Reconciliation

	Active Members		Inactive Members				Total
	Regular	Deferred Option Plan	Deferred Vested Members	Retired Members	Disabled Members	Beneficiaries	
As of July 1, 2001	3,816	366	55	1,556	151	412	6,356
Deferred Option Plan Retirees	(92)	92	0	0	0	0	0
Age Retirements	(15)	(93)	(7)	115	0	0	0
Disability Retirements	(5)	(1)	0	0	6	0	0
Deaths Without Beneficiaries	(3)	(1)	(3)	(8)	(1)	(23)	(39)
Deaths With Beneficiaries	0	(2)	0	(12)	(4)	18	0
Nonvested Terminations	(184)	0	0	0	0	0	(184)
Vested Terminations	(8)	0	8	0	0	0	0
Rehires	16	0	(1)	0	0	0	15
Expiration of Benefits	0	0	0	(2)	0	(6)	(8)
Vested Terminations Electing a Cash-Out	(9)	0	0	0	0	0	(9)
Data Corrections	0	0	0	0	1	2	3
Transfers Out	0	0	0	0	0	0	0
Transfers In	0	0	0	0	0	0	0
Net Change	(300)	(5)	(3)	93	2	(9)	(222)
New Entrants During the Year	320	0	0	0	0	0	320
As of July 1, 2002	3,836	361	52	1,649	153	403	6,454

SECTION 4.1

SYSTEM MEMBERS (CONTINUED)

B. Count of Active Members

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 20										
20-24	136									136
25-29	529	93								622
30-34	392	354	119							865
35-39	151	198	384	122	1					856
40-44	70	92	195	245	108	2				712
45-49	26	52	69	97	141	39				424
50-54	6	21	34	39	36	44	7			187
55-59			14	5	8	3	1			31
60-64		2	1							3
65-69										0
70-74										0
75+										0
Total	1,310	812	816	508	294	88	8	0	0	3,836

C. Average Compensation

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 20										
20-24	27,582									27,582
25-29	31,795	37,417								32,636
30-34	31,326	39,849	48,466							37,172
35-39	29,872	38,965	49,269	54,110	34,456					44,136
40-44	29,872	38,731	47,570	52,422	57,854	70,833				47,983
45-49	28,935	38,040	45,906	48,057	57,890	63,324				49,980
50-54	30,117	34,554	43,462	46,750	53,499	64,245	64,706			50,337
55-59			48,038	47,752	52,261	54,400	57,079			49,989
60-64		26,573	63,233							38,793
65-69										0
70-74										0
75+										0
Total	30,828	38,943	48,215	51,513	57,106	63,651	63,753	0	0	41,820

SECTION 4.1

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 51	158	\$ 1,213,430	35	\$ 670,562	45	\$ 417,786	238	\$ 4,586,218
51	51	1,213,430	2	50,619	3	39,491	56	1,303,540
52	53	1,318,239	4	73,301	7	72,071	64	1,463,611
53	78	1,926,832	10	220,711	4	69,806	92	2,217,349
54	100	2,566,653	1	22,288	8	109,996	109	2,698,937
55	92	2,323,427	10	228,642	3	58,053	105	2,610,122
56	92	2,537,024	11	251,127	0	0	103	2,788,151
57	77	2,054,483	8	194,868	5	79,742	90	2,329,093
58	51	2,016,571	6	146,671	3	63,489	88	2,226,731
59	51	1,879,168	5	92,797	3	19,481	82	1,991,446
60	51	1,963,952	6	103,431	3	32,143	84	2,099,526
61	51	1,752,459	7	162,027	4	71,557	79	1,986,043
62	51	1,774,492	9	200,492	5	99,713	84	2,074,697
63	51	1,645,019	7	160,237	3	56,906	72	1,862,162
64	55	1,383,157	9	259,169	4	67,404	68	1,709,730
65	44	1,116,931	5	136,180	3	58,931	52	1,312,042
66	47	1,145,058	11	246,957	4	94,796	62	1,486,811
67	48	1,214,252	12	293,029	4	66,847	64	1,574,128
68	40	1,032,888	11	293,124	2	39,769	53	1,365,781
69	22	532,227	9	274,808	2	31,537	33	838,572
70	37	962,533	9	217,600	2	44,833	48	1,224,966
71	31	855,087	6	107,055	3	56,683	40	1,018,825
72	19	490,601	13	377,220	4	86,951	36	954,772
73	26	619,356	17	453,491	4	108,249	47	1,181,096
74	25	702,531	11	275,304	3	76,619	39	1,054,454
75	22	539,624	13	279,704	5	133,203	40	952,531
76	16	430,752	12	280,873	3	73,696	31	785,321
77	11	277,166	5	109,391	2	46,573	18	433,130
78	12	309,965	14	321,127	0	0	26	631,092
79	14	336,656	15	264,658	0	0	29	601,314
80	11	252,462	6	138,177	3	44,290	20	434,929
81	10	241,275	12	264,110	2	36,732	24	542,117
82	10	216,496	3	71,499	1	14,442	14	302,437
83	2	24,032	5	103,141	2	39,478	9	166,651
84	4	78,392	11	202,035	0	0	15	280,427
85	8	162,122	6	90,099	0	0	14	252,221
86	0	0	7	145,593	0	0	7	145,593
87	0	0	11	223,706	1	11,548	12	235,254
88	1	28,742	4	75,113	2	28,169	7	132,024
89	1	9,454	10	198,378	1	13,912	12	221,744
90	0	0	9	169,136	1	21,776	10	190,912
Over 90	3	45,354	26	487,306	0	0	29	532,660
Total	1,649	\$ 41,476,732	403	\$ 8,935,756	153	\$ 2,386,672	2,205	\$ 52,799,160

SECTION 4.1**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	10	\$ 139,108	0	\$ 0
40	4	50,229	0	0
41	2	18,430	1	24,557
42	4	42,858	8	181,192
43	1	7,134	15	403,937
44	4	52,931	13	320,367
45	4	62,530	22	590,894
46	7	79,315	25	644,382
47	2	22,424	21	578,291
48	2	13,253	28	780,421
49	6	57,973	28	806,477
50	1	4,244	36	1,027,682
51	1	10,506	20	560,821
52	2	18,228	18	613,768
53	0	0	25	750,145
54	0	0	34	1,266,931
55	0	0	17	615,011
56	0	0	18	579,294
57	0	0	12	389,767
58	0	0	8	240,081
59	0	0	5	141,325
60	0	0	3	89,954
61	0	0	1	30,417
62	0	0	1	27,756
63	0	0	0	0
64	0	0	0	0
65 and over	0	0	2	94,014
Total	52	\$ 603,298	361	\$ 10,757,484

SECTION 4.1

SYSTEM MEMBERS (CONTINUED)

F. Member Statistics

Inactive Members as of July 1, 2002	Number	Amount of Annual Benefit
Members Receiving Benefits		
a. Retired	1,649	\$ 41,476,732
b. Beneficiaries	403	8,935,756
c. Disabled	153	2,386,672
Total	2,205	\$ 52,799,160
Members with Deferred Benefits		
a. Terminated Vested	52	\$ 603,298
b. Beneficiaries	N/A	N/A
c. Disabled	N/A	N/A
Total	52	\$ 603,298
Deferred Option Plan Members		
	361	\$ 10,757,484

Statistics for Active Members	Number	Average		
		Age	Service	Earnings
As of July 1, 2001				
a. Continuing	3,463	37.2	9.9	\$ 41,865
b. New	353	29.2	0.7	23,721
Total	3,816	36.5	9.1	\$ 40,186
As of July 1, 2002				
a. Continuing	3,500	37.4	10.0	\$ 43,296
b. New	336	29.4	0.6	26,436
Total	3,836	36.7	9.2	\$ 41,820

SECTION 4.1

SYSTEM MEMBERS (CONTINUED)

G. Data Tape Reconciliation

	July 1, 2002	July 1, 2001
Tape Records Submitted		
Records submitted	7,145	6,946
Not Eligible to Participate	0	0
Terminations/ No Benefits Payable	(692)	(590)
Denied Benefit	0	0
Data Corrections	0	0
Number Added	1	0
Total Valued	6,454	6,356

SECTION 4.2

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 actually on hand 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;
- 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;

SECTION 4.2

ACTUARIAL BASIS (CONTINUED)

B. Asset Valuation Method (continued)

- 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. However, they are included at market value and are not subject to the smoothing described above.

The System has used this method since at least 1998.

C. Valuation Procedures

No actuarial accrued liability is held for nonvested, inactive Members who have a break in service, or for nonvested Members who have quit or been terminated, even if a break in service had not occurred as of the valuation date.

The wages used in the projection of benefits and liabilities are July 1, 2002 rates of pay based upon the prior year's 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 dollar limitation and compensation limitation required by the Internal Revenue Code Section 401 and 415 for governmental plans.

No additional liability is being carried for the guaranteed minimum interest rate for the Deferred Option Plan account balances. Stochastic studies of similar Systems have been used to quantify the cost of this benefit. Further review and analysis of this liability is recommended. Please note that this is a volatile benefit and the impact in any one-year may be large.

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.

SECTION 4.2

ACTUARIAL BASIS (CONTINUED)

C. Valuation Procedures (continued)

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.

SECTION 4.2

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions

The actuarial assumptions are selected by the Board with the recommendation of the actuary.

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	Current Assumption		
	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

SECTION 4.2

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions (continued)

Demographic Assumptions

1. Retirement Rates

Sample rates below:

Attained Service	Annual Rates of Retirement Per 100 Eligible Members
	Current Assumption
20	30
21	30
22	20
23	20
24	25
25	25
26	30
27	35
28	40
29	45
30	100

2. Mortality Rates

- (a) Active employees
(pre-retirement)

Current Assumption: RP-2000 No Collar Healthy
Employees (Generational)

- (b) Active employees
(post-retirement) and
nondisabled pensioners

Current Assumption: RP-2000 Blue Collar Healthy
Annuitant (Generational)

- (c) Disabled pensioners

Current Assumption: RP-2000 Blue Collar Healthy
Annuitant (Set forward 7 years)

SECTION 4.2

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions (continued)

Demographic Assumptions (continued)

3. Disability Rates

Graduated rates. See table below:

Age Range	Rate
	Current Assumption
20-24	.0002
25-29	.0004
30-34	.0006
35-39	.0011
40-44	.0020
45-49	.0020
50-54	.0020
55-59	.0010

4. Withdrawal Rates

Graduated rates by years of service.

Service Range	Rate
	Current Assumption
0-1	.100
2	.085
3	.070
4	.060
5-10	.040
11-15	.020
16-20	.005
Over 20	.000

5. Marital Status

(a) Percentage married:

Males: 85%; Females: 85%

(b) Age difference:

Males are assumed to be three (3) years older than females.

SECTION 4.2

ACTUARIAL BASIS (CONTINUED)

D. Actuarial Assumptions (continued)

Other Assumptions

1. Assumed Age of Commencement
for Deferred Benefits: Age 50.
2. Provision for Expenses: Administrative Expenses, as budgeted by the Oklahoma Police Pension and Retirement System.
3. Percentage of Disability: Based upon information provided by the Executive Director, we assume that employees becoming disabled have a 25%-49% impairment.
4. 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%, with a 2% minimum benefit increase assumed.

Members, not eligible for this increase are assumed to receive a 2% annual ad hoc increase in benefits during each year of retirement. This assumption was adopted in 2000.
5. Deferred Option Plan: Deferred Option Plan members are assumed to remain in the Deferred Option Plan for the maximum of five years prior to electing a lump sum.

SECTION 4.3

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 as officers 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.
Salary Considered:	<p>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.</p> <p>Final average salary means the average paid gross salary for normally scheduled hours of an officer over the highest 30 consecutive months of the last 60 months of credited service.</p>

SECTION 4.3

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

State Contributions:	Insurance premium tax allocation.
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:	Lifetime benefit.
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.
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.

SECTION 4.3

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

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.

<u>% Impairment</u>	<u>% of Benefit</u>
1% to 49%	50%
50% to 74%	75%
75% to 99%	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:

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

<u>% Impairment</u>	<u>% of Benefit</u>
1% to 24%	25%
25% to 49%	50%
50% to 74%	75%
75% to 99%	90%

SECTION 4.3

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

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).

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.

If an active Member dies prior to retirement without leaving a beneficiary, a refund of the accumulated contributions made by the Member will be paid to the estate.

Beneficiary:

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

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

SECTION 4.3

SUMMARY OF SYSTEM PROVISIONS (CONTINUED)

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. Participation in the Deferred Option Plan shall not exceed five years. The employees' contributions cease upon entering the Plan, but the employer contributions are divided equally between the Retirement System and Deferred Option Plan. The monthly retirement benefits that the employee is eligible to receive are paid into the Deferred Option Plan account.

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

When the Member actually terminates employment, the Deferred Option Plan account balance may be paid in a lump sum or to an annuity provider. Monthly retirement benefits are then paid directly to the retired Member.

This Plan became effective during the July 1, 1990 to June 30, 1991 Plan Year. The Deferred Option Plan account is guaranteed a minimum of the valuation interest rate for investment return, or 2% less than the fund rate of return, if greater.

ADDENDUM TO JULY 1, 2002 ACTUARIAL VALUATION

CERTIFICATION

We have prepared an actuarial valuation of the Oklahoma Police Pension and Retirement System as of July 1, 2002, for the plan year ending June 30, 2003. 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, 2002.

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.

The results in this Addendum have been prepared for the sole purpose of meeting the Retirement Board's requirement to submit this information to the Oklahoma State Pension Oversight Commission, based on the following prescribed assumptions (11 O.S. 2001, Section 50-105.4, Section H):

Interest rate: 7.5%

COLA assumption: 2.0%

Mortality: RP 2000 Generational Mortality Table

Amortization period: 30 years, open period

Sources of all contributions and revenues, including dedicated tax fee revenue and federal monies

All other assumptions, methodologies, and plan provisions used are consistent with those used in the July 1, 2002 valuation.

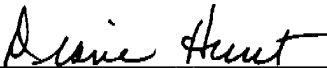
The results shown in this Addendum are not consistent with those in the July 1, 2002 valuation. The July 1, 2002 valuation results were determined in accordance with generally accepted actuarial principles and procedures, and are in compliance with the Actuarial Standards of Board Actuarial Standard of Practice No. 27-Selection of Economic Assumptions for Measuring Pension Obligations. The results shown in this Addendum are not based on the assumptions and methodologies adopted by the Retirement Board. For those results, see the July 1, 2002 actuarial valuation.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.



William B. Fornia, F.S.A., M.A.A.A.

September 17, 2002



Diane Hunt, F.S.A., M.A.A.A.

September 17, 2002

Buck Consultants
1200 17th Street, Suite 1200
Denver, CO 80202
720.359.7700

SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED ASSUMPTIONS

This supplemental report has been prepared by Buck Consultants, Inc. for the Oklahoma Police Pension Retirement Board to present the results of a valuation of the Oklahoma Police Pension and Retirement System as of July 1, 2002, based on the prescribed assumptions under 11 O.S. 2001, Section 50-105.4, Section H of current State Statutes and regulations issued thereunder.

A summary of principal valuation results from the current valuation follows.

Actuarial Valuation as of July 1, 2002	
Summary of Costs	
Required State Contribution for Current Year under Prescribed Assumptions	\$ 27,968,336
Actual State Contribution Received in Prior Year	\$ 19,811,000
Funded Status	
Actuarial Accrued Liability	\$ 1,565,810,136
Actuarial Value of Assets	\$ 1,370,024,000
Unfunded Actuarial Accrued Liability	\$ 195,786,136
Market Value of Assets and Additional Liabilities	
Market Value of Assets	\$ 1,156,636,000
Present Value of Projected System Benefits	\$ 1,978,328,593

SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED ASSUMPTIONS

Summary of Contribution Requirements	Actuarial Valuation as of	
	July 1, 2002	
	Amount	% of Active Covered Comp.
1. Annual Covered Compensation for Members Included in Valuation		
a. Active Members	\$ 160,419,776	N/A
b. Deferred Option Plan Members	19,323,077	N/A
c. Total	\$ 179,742,853	N/A
2. Total Normal Cost Mid-year	\$ 44,857,892	28.0%
3. Unfunded Actuarial Accrued Liability	\$ 195,786,136	N/A
4. Amortization of Unfunded Actuarial Accrued Liability over 30 years From July 1, 2002 at mid-year	\$ 15,999,171	10.0%
5. Budgeted Expenses	\$ 2,055,426	1.3%
6. Total Required Contribution under Prescribed Assumptions (2 + 4 + 5)	\$ 62,912,489	39.2%
7. Estimated Employee Contribution (8% x 1a)	\$ 12,833,582	8.0%
8. Estimated Municipality Contributions		
a. Active Members	\$ 20,854,571	13.0%
b. Deferred Option Plan Members	1,256,000	6.5% ⁽¹⁾
c. Total	\$ 22,110,571	12.3% ⁽²⁾
9. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 2002 at mid-year (6 - 7 - 8c)	\$ 27,968,336	17.4%

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

(2) Percent of total compensation.

(3) Percent of previous years' annual compensation for active members.

SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED ASSUMPTIONS

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, 2002
1. Actuarial Present Value of Benefits	
a. Active Members	\$ 1,034,890,828
b. Members with Deferred Benefits	6,231,933
c. Members Receiving Benefits who are not eligible for Automatic COLA	509,177,973
d. Members Receiving Benefits who are eligible for Automatic COLA	226,060,881
e. Deferred Option Plan Members ⁽¹⁾	201,966,978
f. COLA Reserve	0
g. Total	\$ 1,978,328,593
2. Actuarial Present Value of Future Normal Costs	\$ 412,518,457
3. Total Actuarial Accrued Liability (1g - 2)	\$ 1,565,810,136
4. Actuarial Value of Assets	\$ 1,370,024,000
5. Unfunded Actuarial Accrued Liability (3 - 4, not less than \$0)	\$ 195,786,136

NORMAL COST

The components of normal cost under the System's funding method are:

Component	July 1, 2002
Retirement Benefits	\$ 38,280,404
Withdrawal Benefits	3,195,637
Disability Benefits	561,321
Death Benefits	1,199,160
Total Normal Cost at Beginning of Year	\$ 43,236,522
Total Normal Cost at Mid-year	\$ 44,857,892
Annual Covered Payroll	\$ 160,419,776
Normal Cost Rate At Mid-year	27.96%

SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED ASSUMPTIONS

LIABILITY DETAIL

Total	July 1, 2002
Present Value of Benefits	\$ 1,978,328,593
Accrued Liability	\$ 1,565,810,136
Normal Cost Mid-Year	\$ 44,857,892

Active	
a. Retirement	\$ 606,141,576
b. Disability	666,742
c. Withdrawal	10,800,415
d. Death	10,583,996
e. Refunds	(5,820,358)
f. Total	\$ 622,372,371
Inactive	
1. Members Eligible for Automatic COLA	
a. Retired Members	\$ 139,324,699
b. Disabled Members	21,932,681
c. Terminated Vested Members	0
d. Deferred Option Plan Members	0
e. Beneficiaries	64,803,501
f. Total	\$ 226,060,881
2. Members Not Eligible for Automatic COLA	
a. Retired Members	\$ 466,019,026
b. Disabled Members	11,604,238
c. Terminated Vested Members	6,231,933
d. Deferred Option Plan Members - Annuities	173,622,978
e. Deferred Option Plan Members - Account Balances	28,344,000
f. Beneficiaries	31,554,709
g. Reserve for COLA's in Future ⁽¹⁾	0
h. Total	\$ 717,376,884
3. Total Inactive (1f + 2h)	\$ 943,437,765
Accrued Liability (Active + Inactive)	\$ 1,565,810,136

(1) Ad Hoc cost of living adjustments (COLAs) are prefunded to the 2% per year level in this valuation. These COLAs are granted periodically, but generally not each year. Therefore, in years in which a COLA is not granted, this reserve is increased to fund future COLA's.

ACTUARIAL ASSUMPTIONS

This section presents and describes the actuarial assumptions used for this supplemental valuation. The census of Members, market and actuarial value of assets, actuarial basis and provisions of the Plan are the same as described in Sections 3 and 4 of the valuation report. The valuation is based on the premise that the Plan will continue in existence.

Economic Assumptions

1. Investment Return (Prescribed) 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	Current Assumption		
	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 ASSUMPTIONS

Demographic Assumptions

1. Retirement Rates

Sample rates below:

Attained Service	Annual Rates of Retirement Per 100 Eligible Members
20	30
21	30
22	20
23	20
24	25
25	25
26	30
27	35
28	40
29	45
30	100

2. Mortality Rates

- (a) Active employees
(pre-retirement)
(Prescribed)

RP-2000 Generational Mortality Tables with generational
projections - Employees

- (b) Active employees
(post-retirement and
nondisabled pensioners)
(Prescribed)

RP-2000 Generational Mortality Tables with generational
projections – Healthy Annuitants (except before age 50
uses Employees mortality)

- (c) Disabled pensioners
(Prescribed)

RP-2000 Generational Mortality Tables with generational
projections – Disabled Retirees

ACTUARIAL ASSUMPTIONS

Demographic Assumptions (continued)

3. Disability Rates

Graduated rates. See table below:

Age Range	Annual Rate
20-24	.0002
25-29	.0004
30-34	.0006
35-39	.0011
40-44	.0020
45-49	.0020
50-54	.0020
55-59	.0010

4. Withdrawal Rates

Graduated rates by years of service.

Service Range	Annual Rate
0-1	.100
2	.085
3	.070
4	.060
5-10	.040
11-15	.020
16-20	.005
Over 20	.000

5. Marital Status

(a) Percentage married:

Males: 85%; Females: 85%

(b) Age difference:

Males are assumed to be three (3) years older than females.

ACTUARIAL ASSUMPTIONS

Other Assumptions

1. Assumed Age of Commencement for Deferred Benefits: Age 50.
2. Provision for Expenses: Administrative Expenses, as budgeted by the Oklahoma Police Pension and Retirement System.
3. Percentage of Disability: Based upon information provided by the Executive Director, we assume that employees becoming disabled have a 25%-49% impairment.
4. Cost-of-Living Allowance: (Prescribed) 2% annually.
5. Deferred Option Plan: Deferred Option Plan members are assumed to remain in the Deferred Option Plan for the maximum of five years prior to electing a lump sum.