

**OKLAHOMA FIREFIGHTERS
PENSION AND RETIREMENT SYSTEM**

**ACTUARIAL VALUATION REPORT
AS OF JULY 1, 2010**

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Addendum to July 1, 2010 Actuarial Valuation Valuation Results under Prescribed Assumptions	

This report has been prepared by Buck Consultants for the Oklahoma Firefighters Retirement Board to:

- Present the results of a valuation of the Oklahoma Firefighters Pension and Retirement System as of July 1, 2010;
- Review experience under the Plan for the year ended June 30, 2010; 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 Plan, on a GASB No. 25 basis, has decreased since the prior valuation as indicated by the table below:

GASB No. 25 Funded Status (\$000,000)	July 1, 2010	July 1, 2009
Accrued Liability	\$ 3,149.4	\$ 3,075.1
Actuarial Value of Assets	\$ 1,681.5	\$ 1,668.0
Unfunded Accrued Liability	\$ 1,467.9	\$ 1,407.1
Funded Ratio	53.4%	54.2%

- The funded ratio on a ASC 960 basis, measuring the market value of Plan assets versus the present value of benefits accrued as of the valuation date, increased from 57.3% to 58.9%.
- The total required contribution for the System increased by 4.2% and the required State contribution increased by 5.4%.

Contribution Summary (\$000,000)	July 1, 2010	July 1, 2009
Total Required Contribution	\$ 215.6	\$ 206.9
Expected Employee Contributions	(19.9)	(19.7)
Expected Municipality Contributions	(33.2)	(33.0)
Required State Contribution	\$ 162.5	\$ 154.2
--As a Percentage of Active Payroll	65.4%	62.5%

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or Plan provisions between the two valuations are described in the section titled “Effects of Changes.”

	Actuarial Valuation as of	
	July 1, 2010	July 1, 2009
Summary of Costs		
Total Contribution Requirement ⁽¹⁾	\$ 215,551,043	\$ 206,902,445
Total Contributions Received in Prior Year ⁽²⁾	\$ 105,224,838	\$ 104,329,046

GASB No. 25 Funded Status		
Actuarial Accrued Liability	\$ 3,149,411,893	\$ 3,075,087,927
Actuarial Value of Assets	\$ 1,681,531,081	\$ 1,667,981,545
Unfunded Actuarial Accrued Liability	\$ 1,467,880,812	\$ 1,407,106,382

Market Value of Assets and Additional Liabilities		
Market Value of Assets	\$ 1,479,895,818	\$ 1,389,984,621
Actuarial Present Value of Accumulated Plan Benefits (ASC 960)	\$ 2,513,212,311	\$ 2,424,635,255
Present Value of Projected Plan Benefits	\$ 3,788,266,761	\$ 3,717,002,134

Summary of Data		
Number of Members in Valuation		
Active Paid Members	3,999	4,079
Active Volunteer Members	8,176	7,994
Members with Deferred Benefits	1,153	1,142
Retired Members	5,821	5,662
Beneficiaries	1,917	1,877
Disabled Members	1,718	1,670
Deferred Option Plan Members	120	127
Total	22,904	22,551

Active Member Statistics		
Total Annual Compensation (Paid Members) ⁽³⁾	\$ 248,520,483	\$ 246,816,498
Average Compensation (Paid Members) ⁽³⁾	\$ 62,146	\$ 60,509
Average Age	38.3	38.1
Average Service	9.2	9.1

⁽¹⁾ Excluding Deferred Option Plan Contributions.

⁽²⁾ For the fiscal year beginning July 1, 2006 and each fiscal year thereafter, the System is scheduled to receive 34% of collected state-wide insurance premium taxes.

⁽³⁾ Compensation is projected one year based on the salary increase assumptions

Changes in Actuarial Assumptions and Methods

There were no changes in actuarial assumptions or methods since the prior valuation.

Changes in System Benefits

There were no changes in plan provisions or system benefits with an actuarial impact as of July 1, 2010.

Actuarial Experience During the Plan Year

The actuarial gain/(loss) is shown in the table below:

	Total (000s)
Liability Gain	\$ 91,005
Asset Gain	\$ (68,809)
Net Actuarial Gain/(Loss)	\$ 22,196

The Oklahoma Firefighters Deferred Option Plan (DROP) allows members 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 Firefighters Pension and Retirement System and the other half to the members' accounts in the Deferred Option Plan equal to the retirement benefit accrued under the Plan. After the period of active participation, members must separate from active service as a firefighter and retire. After retirement, however, members may remain as inactive members in this plan and defer receipt of the account balance until payments are required under the minimum distribution rules. The DROP was modified effective July 1, 2003 to allow eligible members to retroactively elect to enter DROP as of a back-drop-date upon termination. The monthly retirement benefits and member contributions that would have been payable had the member elected to enter DROP are credited to the employee's account in the DROP.

The Deferred Option Plan accounts are credited with interest at a rate of 2.0% less than the total fund growth, with a guaranteed minimum interest rate equal to the valuation interest rate of 7.5%. The actual rate credited for the fiscal year ended June 30, 2010 was 7.74%.

Statistics regarding the number of Deferred Option Plan members and total account balances are shown in the table below:

DROP Statistics	July 1, 2010	July 1, 2009
Number of Members		
Active	120	127
Inactive	1,522	1,431
Total	1,642	1,558
Account Balances	\$ 315,107,044	\$ 288,381,753 *
Annual Retirement Benefits of Active Members	\$ 3,177,504	\$ 3,106,680

* The DROP account balance was reported as \$293,390,473 for the July 1, 2009 valuation. After the July 1, 2009 report was issued, a portion of the interest credited to the DROP account balance was reclassified and the account balance was revised to be \$288,381,753. We have changed the July 1, 2009 account balance in this report to show the revised amount in the reconciliation of assets; however, we have not recalculated the July 1, 2009 liability or contribution amount and continue to show the actual amount used in those calculations.

- We have prepared an actuarial valuation of the Oklahoma Firefighters Pension and Retirement System as of July 1, 2010, for the plan year ending June 30, 2010. 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, 2010.

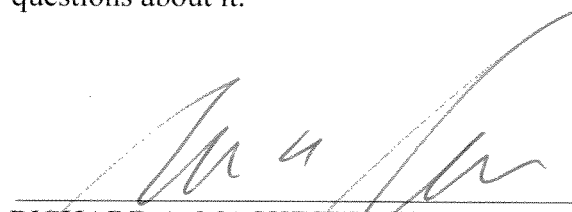
The valuation is based on employee and financial data which were provided by the Oklahoma Firefighters Pension and Retirement System and the independent auditor, respectively, and which are summarized in this report.

Any changes in benefit provisions since the last valuation of the System as of July 1, 2009 are summarized on page 3. There have been no changes in actuarial assumptions or methods since the last valuation.

Actuarial Certification

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

We are Enrolled Actuaries, Fellows of the Society of Actuaries and Members of the American Academy of Actuaries. We 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.



RICHARD A. MACKESEY, FSA, EA, MAAA

October 8, 2010



DAVID KENT, FSA, EA, MAAA

October 8, 2010

Section 1.1 Calculation 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

CALCULATION OF CONTRIBUTION REQUIREMENT

C. Summary of Contribution Requirements	Actuarial Valuation as of			
	July 1, 2010		July 1, 2009	
	Amount	% of Covered Comp.	Amount	% of Covered Comp.
1. Annual Compensation				
a. Members included in Valuation (Covered Compensation)	\$ 248,520,483		\$ 246,816,498	
b. Deferred Option Plan Members	6,270,151		6,188,940	
c. Total Compensation	254,790,634		253,005,438	
2. Total Normal Cost Mid-year	\$ 83,041,064	33.4%	\$ 81,832,133	33.2%
3. Unfunded Actuarial Accrued Liability	\$ 1,467,880,812		\$ 1,407,106,382	
4. Amortization of Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 Mid-year ⁽¹⁾	\$ 131,006,817	52.7%	\$ 123,567,150	50.1%
5. Budgeted Expenses	\$ 1,503,162	0.6%	\$ 1,503,162	0.6%
6. Total Required Contribution (2 + 4 + 5)	\$ 215,551,043	86.7%	\$ 206,902,445	83.8%
7. Estimated Member Contribution	\$ 19,881,639	8.0%	\$ 19,745,320	8.0%
8. Estimated Employer Contribution				
a. Active Members – Paid	\$ 32,307,663	13.0%	\$ 32,086,145	13.0%
b. Deferred Option Plan Members – Paid	407,560	6.5% ⁽²⁾	402,281	6.5% ⁽²⁾
c. Active Members - Volunteer	490,560		479,640	
d. Deferred Option Plan Members – Volunteer	1,050		1,230	
e. Total	\$ 33,206,833	13.0% ⁽³⁾	\$ 32,969,296	13.0% ⁽³⁾
9. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 at Mid-year. (6 - 7 - 8e)	\$ 162,462,571	65.4%	\$ 154,187,829	62.5%
10. Previous year's actual State Contribution ⁽⁴⁾	\$ 54,159,341	21.8%	\$ 53,989,458	21.9%
11. Approximate period over which previous year's State Contribution will amortize Unfunded Actuarial Accrued Liability (UAAL) from July 1, 2003	Not sufficient to amortize UAAL		Not sufficient to amortize UAAL	

⁽¹⁾ Funding Policy adopted by Board.

⁽²⁾ Percentage of Deferred Option Plan Compensation.

⁽³⁾ Percent of Total Compensation.

⁽⁴⁾ The System is scheduled to receive 34% of collected state-wide insurance premium taxes.

CALCULATION OF CONTRIBUTION REQUIREMENT (CONTINUED)

D. Allocation of Contribution Requirements	July 1, 2010		
	Paid	Volunteer	Total
1. Total Normal Cost Mid-year	\$ 79,921,497	\$ 3,119,567	\$ 83,041,064
2. Unfunded Actuarial Accrued Liability ⁽¹⁾	1,371,857,018	96,023,794	1,467,880,812
3. Amortization of Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 Mid-year ⁽²⁾	122,436,795	8,570,022	131,006,817
4. Budgeted Expenses ⁽³⁾	1,404,830	98,332	1,503,162
5. Total Required Contribution (1 + 3 + 4)	203,763,122	11,787,921	215,551,043
6. Estimated Member Contribution	19,881,639	0	19,881,639
7. Estimated Employer Contribution			
a. Active Members	32,307,663	490,560	32,798,223
b. Deferred Option Plan Members	407,560	1,050	408,610
c. Total	32,715,223	491,610	33,206,833
8. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 at Mid-year (5 - 6 - 7c)	151,166,260	11,296,311	162,462,571

(1) See Section 1.3 for allocation.

(2) Funding Policy Adopted by Board.

(3) Allocation based on total Actuarial Accrued Liability.

LIABILITY DETAIL

Total	
Present Value of Benefits	\$ 3,788,266,761
Present Value of Future Normal Cost	\$ 638,854,868
Accrued Liability	\$ 3,149,411,893
Normal Cost Mid-year	\$ 83,041,064

Active	
a. Retirement	\$ 1,116,925,200
b. Withdrawal	7,839,506
c. Disability	10,117,805
d. Death	17,304,361
e. Total	\$ 1,152,186,872
Inactive	
1. Members Eligible for Automatic COLA	
a. Disabled Members	\$ 68,793,871
b. Beneficiaries	108,480,247
c. Retired Members	127,143,550
d. Total	\$ 304,417,668
2. Members Not Eligible for Automatic COLA	
a. Terminated Vested Members	28,497,397
b. Disabled Members	486,115,087
c. Beneficiaries	123,109,036
d. Retired Members	689,787,755
e. Deferred Option Plan Members - Annuity	50,191,034
f. Deferred Option Plan Members - Account Balances	315,107,044
g. Total	\$ 1,692,807,353
3. Total Inactive (1d + 2g)	\$ 1,997,225,021
4. COLA Reserve	\$ 0
Accrued Liability (Active + Inactive + COLA Reserve)	\$ 3,149,411,893

UNFUNDED ACTUARIAL ACCRUED LIABILITY

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

	Total Plan	
	July 1, 2010	July 1, 2009
1. Actuarial Present Value of Benefits		
a. Active Members	\$ 1,791,041,740	\$ 1,767,191,662
b. Members with Deferred Benefits	28,497,397	28,338,332
c. Members Receiving Benefits who are eligible for Automatic COLA	304,417,668	318,766,308
d. Members Receiving Benefits who are not eligible for Automatic COLA	1,299,011,878	1,234,682,665
e. Deferred Option Plan Members ⁽¹⁾	365,298,078	342,350,317
f. COLA Reserve	0	25,672,850
g. Total	3,788,266,761	3,717,002,134
2. Actuarial Present Value of Future Normal Costs	\$ 638,854,868	\$ 641,914,207
3. Total Actuarial Accrued Liability (1g - 2)	\$ 3,149,411,893	\$ 3,075,087,927
4. Actuarial Value of Assets	\$ 1,681,531,081	\$ 1,667,981,545
5. Unfunded Actuarial Accrued Liability (3 - 4, not less than \$0)	\$ 1,467,880,812	\$ 1,407,106,382

Allocation of Current Year Between Paid and Volunteer:

	Total Plan		
	Paid	Volunteer	Total
1. Actuarial Present Value of Benefits			
a. Active Members	\$ 1,715,412,144	\$ 75,629,596	\$ 1,791,041,740
b. Members with Deferred Benefits	4,917,856	23,579,541	28,497,397
c. Members Receiving Benefits who are eligible for Automatic COLA	304,417,668	0	304,417,668
d. Members Receiving Benefits who are not eligible for Automatic COLA	1,176,113,529	122,898,349	1,299,011,878
e. Deferred Option Plan Members ⁽¹⁾	364,217,576	1,080,502	365,298,078
f. COLA Reserve	0	0	0
g. Total	3,565,078,773	223,187,988	3,788,266,761
2. Actuarial Present Value of Future Normal Costs	621,690,746	17,164,122	638,854,868
3. Total Actuarial Accrued Liability (1g - 2)	2,943,388,027	206,023,866	3,149,411,893
4. Actuarial Value of Assets ⁽²⁾	1,571,531,009	110,000,072	1,681,531,081
5. Unfunded Actuarial Accrued Liability (3 - 4, not less than \$0)	1,371,857,018	96,023,794	1,467,880,812

⁽¹⁾ Effective July 1, 1997, Deferred Option Account balances are included as liability and assets. The total Account Balance on July 1, 2010, is \$315,107,044 and the balance used on July 1, 2009, is \$293,390,473.

⁽²⁾ Allocated based on total actuarial accrued liability (item 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, 2010.

	Regular	Deferred Option	Total
1. Expected Actuarial Accrued Liability			
a. Actuarial Accrued Liability at July 1, 2009	\$ 2,781,697,454	\$ 293,390,473	\$ 3,075,087,927
b. Normal Cost at July 1, 2009	69,644,470	0	69,644,470
c. Reserve for DROP Interest Rate Guarantee and DROP Contribution at Mid-Year	5,194,651	4,428,557	9,623,208
d. Benefit Payments for Plan Year Ending June 30, 2010	140,482,934	4,332,859	144,815,793
e. Interest on a + b + c - d to End of Year	208,869,050	22,007,809	230,876,859
f. Cost of Amendment	0	0	0
g. COLA Reserve	0	0	0
h. Expected Actuarial Accrued Liability at July 1, 2010 (a + b + c - d + e + f + g)	\$ 2,924,922,691	\$ 315,493,980	\$ 3,240,416,671
2. Actuarial Accrued Liability at July 1, 2010	\$ 2,834,304,849	\$ 315,107,044	\$ 3,149,411,893
3. Actuarial Liability Gain/(Loss) (1h - 2)	\$ 90,617,842	\$ 386,936	\$ 91,004,778
4. Expected Actuarial Value of Assets			
a. Actuarial Value of Assets at July 1, 2009	\$ 1,374,591,072	\$ 293,390,473	\$ 1,667,981,545
b. Contributions Made for Plan Year Ending June 30, 2010	100,796,281	4,428,557	105,224,838
c. Benefit Payments and Expenses for Plan Year Ending June 30, 2010	142,114,476	4,332,859	146,447,335
d. Interest on a + b - c to End of Year	101,572,909	22,007,809	123,580,718
e. Expected Actuarial Value of Assets at July 1, 2010 (a + b - c + d)	\$ 1,434,845,786	\$ 315,493,980	\$ 1,750,339,766
5. Actuarial Value of Assets as of July 1, 2010			
a. Actuarial Value of Assets as of July 1, 2010 prior to DROP transfer	\$ 1,378,288,625	\$ 303,242,456	\$ 1,681,531,081
b. DROP transfer	(11,864,588)	11,864,588	0
c. Actuarial Value of Assets as of July 1, 2010 after DROP transfer	\$ 1,366,424,037	\$ 315,107,044	\$ 1,681,531,081
6. a. Actuarial Asset Gain/(Loss) Before DROP Transfer (5a-4e)	\$ (56,557,161)	\$ (12,251,524)	\$ (68,808,685)
b. Actuarial Asset Gain/(Loss) After DROP Transfer (5c-4e)	\$ (68,421,749)	\$ (386,936)	\$ (68,808,685)
7. Summary			
a. Actuarial Asset Gain/(Loss) (6a)	\$ (56,557,161)	\$ (12,251,524)	\$ (68,808,685)
b. DROP Guarantee Gain/(Loss) (5b)	(11,864,588)	11,864,588	0
c. Actuarial Liability Gain/(Loss) (3)	90,617,842	386,936	91,004,778
d. Total Actuarial Gain/(Loss) (a + b + c)	\$ 22,196,093	\$ 0	\$ 22,196,093

CONTRIBUTIONS

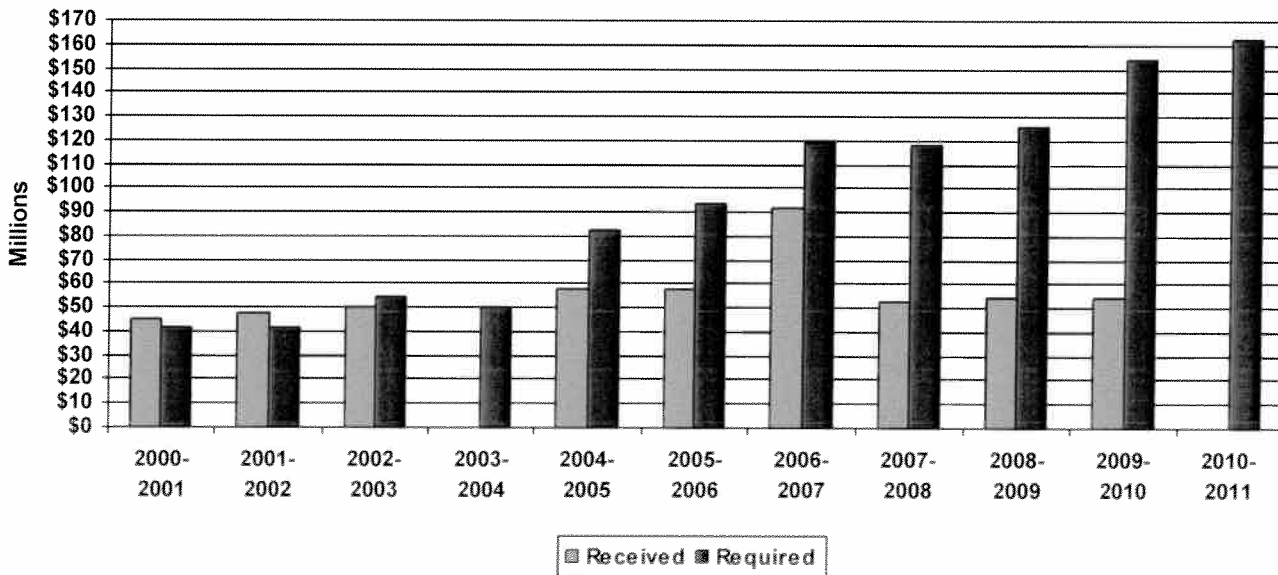
Contributions to the Retirement System are made by the Members, municipalities, fire districts, and the State of Oklahoma.

Paid firefighters contribute 8% of gross salary. Municipalities and fire districts contribute 13.0% of gross salary. For the fiscal year ending June 30, 2010, the fund received a contribution of \$54,159,341 from the State. The System is scheduled to receive 34% of collected statewide insurance premium taxes.

Volunteer firefighters do not contribute to the fund. Municipalities and fire districts that are not exempt contribute \$60 per year per active volunteer.

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. Contributions for members who retroactively elect to enter the Deferred Option Plan as of a back drop date are also deposited into the Deferred Option account.

**State Contributions Received versus
Contributions Required by 30-Year
Funding Policy⁽¹⁾**



⁽¹⁾ 30-year amortization period was reset for plan year ending June 30, 2004 (SB 286) to start at July 1, 2003. Prior to that time, the amortization period was 30 years from July 1, 1988.

TEN-YEAR PROJECTED CASH FLOW ⁽¹⁾
(RETIREMENT BENEFIT PAYMENTS)

Plan Year Ending	Actives	Retirees ⁽²⁾	Total
6/30/2011	\$ 6,194,602	\$ 128,880,237	\$ 135,074,839
6/30/2012	16,514,561	130,582,281	147,096,842
6/30/2013	26,573,753	132,149,730	158,723,493
6/30/2014	36,537,341	133,651,769	170,189,110
6/30/2015	46,617,401	135,004,833	181,622,234
6/30/2016	56,990,836	136,211,567	193,202,403
6/30/2017	67,533,333	137,175,268	204,708,601
6/30/2018	77,934,984	137,920,635	215,855,619
6/30/2019	88,271,287	138,421,894	226,693,181
6/30/2020	99,034,329	138,715,908	237,750,237

⁽¹⁾ Includes payment to DROP as retirement benefits.

⁽²⁾ Includes Deferred Option Plan Members, Disabled Members, Beneficiaries and Terminated Vested Members.

Section 2.1 ASC 960 Information (formerly SFAS No. 35 Information)

Section 2.2 GASB No. 25 Information

ASC 960 INFORMATION

A. Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of vested and nonvested accumulated Plan Benefits was computed on an ongoing plan basis in order to provide required information under Accounting Standard Codification 960 (formerly Financial Accounting Standards Board Statement No. 35). In this calculation, a determination is made of all benefits earned by current Members as of the calculation 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 Plan Benefits	July 1, 2010	July 1, 2009
Vested Benefits		
a. Active Members	\$ 665,261,868	\$ 641,268,669
b. Deferred Option Plan Members	355,131,608	332,480,768
c. Members with Deferred Benefits	23,069,552	22,907,274
d. Members Receiving Benefits	1,373,242,566	1,333,442,590
e. Total Vested Benefits	2,416,705,594	2,330,099,301
Nonvested Benefits	96,506,717	94,535,954
Total Accumulated Plan Benefits	\$ 2,513,212,311	\$ 2,424,635,255
Assumed Rate of Interest	7.5%	7.5%
Market Value of Assets Available for Benefits	\$ 1,479,895,818	\$ 1,389,984,621
Funded Ratio	58.88%	57.33%

	July 1, 2010	July 1, 2009
Vested Members		
a. Active Members	4,873	4,798
b. Deferred Option Plan Members	120	127
c. Members with Deferred Benefits	1,153	1,142
d. Members Receiving Benefits	9,456	9,209
e. Total Vested Members	15,602	15,276
Nonvested Members	7,302	7,275
Total Members	22,904	22,551

ASC 960 INFORMATION (CONTINUED)**B. Statement of Changes in Accumulated Plan Benefits**

A statement of changes in the actuarial present value of accumulated Plan 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 Plan Benefits as of July 1, 2009	\$ 2,424,635,255
Increase/(Decrease) During Year Attributable to:	
a. Normal Cost ⁽¹⁾	\$ 74,582,057
b. Increase for Interest Due to Decrease in Discount Period	182,108,881
c. Benefits Paid	(144,815,793)
d. Plan Amendment	0
e. Funding Method Changes	0
f. Assumption Changes	0
g. (Gains)/Losses	(23,298,089)
Net Increase/(Decrease)	\$ 88,577,056
Actuarial Present Value of Accumulated Plan Benefits as of July 1, 2010	\$ 2,513,212,311

⁽¹⁾ Includes 3.28% of July 1, 2009, DROP account balance (\$288,381,753) as a reserve for the expected cost of the interest rate guarantee on the DROP.

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

GASB No. 25 INFORMATION

Supplementary Schedules

The GASB has issued a 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 Firefighters Pension and 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.

A. Schedule of Funding Progress

The GASB Statement No. 25 liabilities and assets resulting from the last six 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)
07/01/2005	\$1,485,516,048	\$ 2,332,601,300	\$ 847,085,252	63.7%	\$ 188,968,929	448.3%
07/01/2006	\$1,546,486,429	\$ 2,666,305,915	\$ 1,119,819,486	58.0%	\$ 204,206,759	548.4%
07/01/2007	\$1,717,070,814	\$ 2,785,218,488	\$ 1,068,147,674	61.6%	\$ 216,710,606	492.9%
07/01/2008	\$1,817,177,365	\$ 2,941,207,332	\$ 1,124,029,967	61.8%	\$ 235,371,501	477.6%
07/01/2009	\$ 1,667,981,545	\$ 3,075,087,927	\$ 1,407,106,382	54.2%	\$ 246,816,498	570.1%
07/01/2010	\$1,681,531,081	\$ 3,149,411,893	\$ 1,467,880,812	53.4%	\$ 248,520,483	590.6%

GASB No. 25 INFORMATION (CONTINUED)**Supplementary Schedules (continued)****B. Schedule of Employer Contributions**

The GASB Statement No. 25 required contribution and actual percentage for the last six fiscal years are as follows:

Year Ended June 30	Annual Required Contribution	Percentage Contributed
2005	\$ 106,735,523	77.0%
2006	118,296,060	69.6%
2007	146,828,788	80.0%
2008	147,273,273	56.4%
2009	157,823,945	52.7%
2010	187,157,125	43.9%

This section presents information regarding plan assets as reported by the system administrator or trustee. The plan assets represent the portion of total plan 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 ⁽¹⁾

Asset Category	Market Value as of June 30, 2010	Market Value as of June 30, 2009
	Amount	Amount
1. Cash and Short-term Investments	\$ 22,129,386	\$ 36,087,469
2. Receivables	\$ 15,696,950	\$ 13,543,552
3. Investments at fair value		
a. Government Bonds	\$ 135,668,591	\$ 202,023,755
b. Foreign Government Bonds	39,729,038	0
c. U.S. Treasury	1,913,653	0
d. International Securities	4,922,030	0
e. Corporate Bonds	107,336,324	137,011,818
f. International Corporate Bonds	1,565,748	0
g. Common Stock	692,446,087	533,465,538
h. Foreign Stock	140,442,246	132,189,383
i. Mortgage-backed Securities	8,167,254	0
j. Municipal Bonds	1,537,769	0
k. Limited Partnerships	310,140,887	339,351,881
l. Securities Lending	174,723,589	140,561,540
m. Total	\$ 1,618,593,216	\$ 1,484,603,915
4. Assets used in plan operations	\$ 47,725	\$ 37,156
5. Total Assets	\$ 1,656,467,277	\$ 1,534,272,092
6. Liabilities	\$ (176,571,459)	\$ (144,287,471)
7. Net Assets for Pension Benefits	\$ 1,479,895,818	\$ 1,389,984,621

⁽¹⁾ Deferred option plan assets are included in the valuation assets. The value of these assets on July 1, 2009, is \$288,381,753 and the value on July 1, 2010, is \$315,107,044.

RECONCILIATION OF ASSETS

Transactions	June 30, 2010	June 30, 2009
Additions		
1. Contributions		
a. Contributions from Employers	\$ 32,063,103	\$ 31,387,215
b. Contributions from Plan Members	19,002,394	18,952,373
c. Insurance Premium Tax	54,159,341	53,989,458
d. Legislative Appropriation	0	0
e. Total	\$ 105,224,838	\$ 104,329,046
2. Net Investment Income	\$ 131,133,694	\$ (311,409,533)
3. Total Additions	\$ 236,358,532	\$ (207,080,487)
Deductions		
4. Benefit Payments	\$ (144,815,793)	\$ (146,645,856)
5. Administrative Expenses	(1,631,542)	(1,508,538)
6. Adjustment	0	0
7. Total Deductions	\$ (146,447,335)	\$ (148,154,394)
8. Net Increase	\$ 89,911,197	\$ (355,234,881)
9. Net Assets Held in Trust for Pension Benefits ⁽¹⁾		
a. Beginning of Year	\$ 1,389,984,621	\$ 1,745,219,502
b. End of Year	\$ 1,479,895,818	\$ 1,389,984,621
10. DROP Assets (included above)		
a. Beginning of Year	\$ 288,381,753	\$ 273,872,784
b. End of Year	\$ 315,107,044	\$ 288,381,753

⁽¹⁾ Includes Deferred Option Plan Assets.

ACTUARIAL VALUE OF ASSETS

Schedule of Assets Gains/(Losses)				
Year	Original Amount	Recognized in Prior Years	Recognized This Year	Recognized in Future Years
2005/2006	\$ 33,142,282	\$ 26,513,824	\$ 6,628,458	\$ 0
2006/2007	120,982,858	72,589,716	24,196,572	24,196,570
2007/2008	(200,717,174)	(80,286,870)	(40,143,435)	(80,286,869)
2008/2009	(453,781,818)	(90,756,364)	(90,756,364)	(272,269,090)
2009/2010	158,405,157	0	31,681,031	126,724,126
Total	\$ (341,968,695)	\$ (71,939,694)	\$ (68,393,738)	\$ (201,635,263)

Development of Actuarial Value of Assets	
1. Actuarial Value as of July 1, 2009 (Excluding DROP) (pre-corridor)	\$ 1,374,591,072
2. Contributions	
a. Employer (Excluding DROP)	\$ 27,634,546
b. Member	19,002,394
c. Insurance Tax	54,159,341
d. Legislative Appropriation	0
e. Total	\$ 100,796,281
3. Decreases During the Year	
a. Benefit Payments (Excluding benefit payments from DROP, including transfer payments to DROP)	\$ 140,482,934
b. Noninvestment Expenses	1,631,542
c. Total	\$ 142,114,476
4. Expected Return at 7.50% on:	
a. Item 1	\$ 103,094,330
b. Item 2	3,779,861
c. Item 3	5,329,293
d. Total (a + b - c)	\$ 101,544,898
5. Expected Actuarial Value of Assets (Excluding DROP) June 30, 2010 (1 + 2 - 3 + 4)	\$ 1,434,817,775
6. Unrecognized Asset Gain/(Loss) as of June 30, 2009	\$ (428,434,158)
7. DROP Assets	\$ 315,107,044
8. Expected Actuarial Value June 30, 2010 plus previous year's Unrecognized Asset Gain/(Loss) (5 + 6 + 7)	\$ 1,321,490,661
9. Market Value June 30, 2010	\$ 1,479,895,818
10. 2009/2010 Asset Gain/(Loss) (9 - 8)	\$ 158,405,157
11. Asset Gain/(Loss) to be Recognized as of June 30, 2010	\$ (68,393,738)
12. Initial Actuarial Value July 1, 2010 (5 + 7 + 11)	\$ 1,681,531,081
13. Constraining Values:	
a. 80% of Market Value (9 x 0.8)	\$ 1,183,916,654
b. 120% of Market Value (9 x 1.2)	1,775,874,982
14. Actuarial Value July 1, 2010 (Including DROP) (12), but no less than (13a), nor greater than (13b)	\$ 1,681,531,081

AVERAGE ANNUAL RATES OF INVESTMENT RETURN

Year Ending June 30	Actuarial Value		Market Value	
	Annual	Cumulative	Annual	Cumulative
1991	7.46%	7.46%	7.77%	7.77%
1992	8.35%	7.90%	13.74%	10.71%
1993	9.42%	8.41%	13.70%	11.70%
1994	8.34%	8.39%	1.75%	9.13%
1995	9.56%	8.62%	15.06%	10.29%
1996	11.30%	9.06%	15.22%	11.09%
1997	25.01%	11.21%	18.24%	12.09%
1998	11.34%	11.23%	18.77%	12.90%
1999	10.32%	11.13%	6.59%	12.18%
2000	10.98%	11.11%	11.08%	12.07%
2001	7.14%	10.74%	(7.88%)	10.09%
2002	1.94%	9.98%	(7.20%)	8.54%
2003	3.56%	9.47%	3.73%	8.16%
2004	2.75%	8.98%	13.32%	8.52%
2005	1.75%	8.48%	9.29%	8.57%
2006	5.39%	8.29%	10.23%	8.67%
2007	10.42%	8.41%	15.93%	9.09%
2008	7.85%	8.38%	(3.80%)	8.33%
2009	(5.87%)	7.58%	(18.07%)	6.75%
2010	3.32%	7.36%	9.58%	6.89%

Annual Returns include Deferred Option Plan Assets.

This section presents and describes the basis of the valuation. The census of Members, actuarial basis and provisions of the Plan 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 Plan will continue in existence.

Section 4.1 Plan Members

Section 4.2 Actuarial Basis

Section 4.3 Summary of Plan Provisions

PLAN MEMBERS

A. Active Member Statistics

Statistics for Active Members	Number	Average		
		Age	Service	Earnings
As of July 1, 2009				
Paid				
a. Continuing	3,892	39.9	13.1	\$ 61,737
b. New	187	28.0	0.7	34,955
c. Total	4,079	39.3	12.5	\$ 60,509
Volunteer				
a. Continuing	6,928	38.7	8.4	N/A
b. New	1,066	29.7	0.7	N/A
c. Total	7,994	37.5	7.4	N/A
Total	12,073	38.1	9.1	N/A
As of July 1, 2010				
Paid				
a. Continuing	3,873	40.0	13.2	\$ 63,086
b. New	126	28.4	0.6	33,244
c. Total	3,999	39.7	12.8	\$ 62,146
Volunteer				
a. Continuing	7,119	38.7	8.4	N/A
b. New	1,057	30.3	0.9	N/A
c. Total	8,176	37.6	7.4	N/A
Total	12,175	38.3	9.2	N/A

PLAN MEMBERS (CONTINUED)

B. Count of Paid 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	3	0	0	0	0	0	0	0	0	3
20-24	155	2	0	0	0	0	0	0	0	157
25-29	362	133	13	0	0	0	0	0	0	508
30-34	221	249	192	10	0	0	0	0	0	672
35-39	125	166	289	170	8	0	0	0	0	758
40-44	50	66	150	239	129	9	0	0	0	643
45-49	15	18	87	160	271	161	7	0	0	719
50-54	4	6	34	66	124	131	56	0	0	421
55-59	0	0	5	7	25	33	24	7	1	102
60-64	0	0	1	4	2	1	5	1	1	15
65-69	0	0	0	1	0	0	0	0	0	1
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	935	640	771	657	559	335	92	8	2	3,999

C. Average Compensation of Paid 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	32,254	0	0	0	0	0	0	0	0	32,254
20-24	39,430	53,789	0	0	0	0	0	0	0	39,613
25-29	44,379	50,406	48,176	0	0	0	0	0	0	46,054
30-34	45,302	52,966	61,794	66,853	0	0	0	0	0	53,174
35-39	45,269	54,067	65,937	73,429	72,512	0	0	0	0	61,679
40-44	47,877	56,333	62,579	73,572	78,446	73,930	0	0	0	68,223
45-49	57,365	55,926	60,057	71,574	76,940	81,470	83,741	0	0	73,849
50-54	50,963	56,359	58,187	66,853	75,184	77,586	82,101	0	0	73,674
55-59	0	0	22,607	67,277	68,856	70,002	83,172	100,975	45,712	72,197
60-64	0	0	9,675	66,064	65,444	58,541	67,918	74,825	68,135	63,061
65-69	0	0	0	31,548	0	0	0	0	0	31,548
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	44,280	53,184	62,593	72,094	76,432	78,550	81,734	97,706	56,924	62,146

PLAN MEMBERS (CONTINUED)

D. Count of Volunteer 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	145	0	0	0	0	0	0	0	0	145
20-24	798	82	0	0	0	0	0	0	0	880
25-29	818	382	43	0	0	1	0	0	0	1,244
30-34	715	351	184	24	0	0	1	0	0	1,275
35-39	562	351	268	127	10	0	0	0	0	1,318
40-44	418	297	252	165	56	4	0	0	0	1,192
45-49	226	251	260	217	94	21	3	0	0	1,072
50-54	23	94	215	191	77	30	7	0	0	637
55-59	11	3	68	129	65	12	9	2	0	299
60-64	1	1	6	30	21	6	5	1	1	72
65-69	1	2	4	13	1	4	0	0	1	26
70-74	0	0	1	6	0	0	2	0	0	9
75+	0	0	0	5	1	1	0	0	0	7
Total	3,718	1,814	1,301	907	325	79	27	3	2	8,176

PLAN MEMBERS (CONTINUED)

E. Inactive Member Statistics

Paid		
Inactive Members as of July 1, 2010	Number	Amount of Annual Benefit
Members Receiving Benefits		
a. Retired	1,929	\$ 53,923,836
b. Beneficiaries	757	20,696,820
c. Disabled	1,382	40,219,800
d. Deferred Option	85	3,110,148
Total	4,153	\$ 117,950,604
Members with Deferred Benefits		
a. Terminated Vested	46	\$ 486,372
Total	46	\$ 486,372

Volunteer		
Inactive Members as of July 1, 2010	Number	Amount of Annual Benefit
Members Receiving Benefits		
a. Retired	3,892	\$ 6,842,928
b. Beneficiaries	1,160	1,989,396
c. Disabled	336	476,808
d. Deferred Option	35	67,356
Total	5,423	\$ 9,376,488
Members with Deferred Benefits		
a. Terminated Vested	1,107	\$ 1,918,872
Total	1,107	\$ 1,918,872

PLAN MEMBERS (CONTINUED)

F. Members in Pay Status - Annual Benefits

Attained Age	Paid							
	Retired Members		Beneficiaries		Disabled Members		Current Payment Total	
	No.	Benefit	No.	Benefit	No.	Benefit	No.	Benefit
Under 50	93	\$ 2,378,436	47	\$ 1,190,040	131	\$ 2,933,904	271	\$ 6,502,380
50	44	1,169,976	6	114,516	27	774,780	77	2,059,272
51	41	1,057,356	4	106,008	33	935,364	78	2,098,728
52	50	1,442,280	8	265,116	40	983,460	98	2,690,856
53	62	1,692,588	4	112,128	39	1,164,396	105	2,969,112
54	61	1,793,988	8	200,172	44	1,302,492	113	3,296,652
55	54	1,494,264	16	473,316	54	1,602,348	124	3,569,928
56	69	2,018,352	14	362,412	49	1,445,808	132	3,826,572
57	70	2,156,496	10	223,968	56	1,808,772	136	4,189,236
58	75	2,067,156	9	239,472	62	1,825,884	146	4,132,512
59	90	2,634,732	8	162,768	52	1,543,248	150	4,340,748
60	65	1,858,344	18	515,244	62	1,964,544	145	4,338,132
61	53	1,404,828	12	332,664	76	2,243,472	141	3,980,964
62	65	1,834,752	15	384,276	40	1,229,832	120	3,448,860
63	77	2,153,412	18	444,036	66	1,959,036	161	4,556,484
64	54	1,308,504	13	327,360	59	1,659,096	126	3,294,960
65	55	1,477,308	23	528,144	45	1,175,868	123	3,181,320
66	60	1,602,396	16	392,004	45	1,361,712	121	3,356,112
67	78	2,018,352	24	535,872	59	1,684,044	161	4,238,268
68	61	1,722,888	24	590,988	54	1,593,144	139	3,907,020
69	65	1,737,588	23	615,432	36	1,121,160	124	3,474,180
70	61	1,519,440	16	427,116	42	1,198,800	119	3,145,356
71	59	1,630,512	19	514,548	34	987,240	112	3,132,300
72	50	1,359,252	26	655,176	27	759,192	103	2,773,620
73	39	1,042,704	20	566,028	22	652,908	81	2,261,640
74	42	1,185,408	28	715,944	19	530,136	89	2,431,488
75	40	1,237,068	25	789,612	16	483,288	81	2,509,968
76	32	927,000	20	551,340	13	397,920	65	1,876,260
77	30	858,720	20	632,712	10	344,652	60	1,836,084
78	28	804,960	23	717,648	8	267,264	59	1,789,872
79	30	852,168	18	531,156	10	403,536	58	1,786,860
80	32	1,037,064	28	801,240	10	355,308	70	2,193,612
81	23	756,540	32	983,856	13	484,608	68	2,225,004
82	24	711,192	18	517,824	6	194,592	48	1,423,608
83	18	556,956	16	403,536	4	123,480	38	1,083,972
84	21	644,148	12	329,544	5	206,796	38	1,180,488
85	12	326,400	11	327,888	3	103,260	26	757,548
86	12	470,664	25	835,248	1	36,588	38	1,342,500
87	10	273,480	12	410,808	5	205,548	27	889,836
88	8	201,900	23	682,824			31	884,724
89	3	136,596	8	227,412	4	136,416	15	500,424
90	4	116,856	16	431,364			20	548,220
Over 90	9	250,812	21	528,060	1	35,904	31	814,776
Total	1,929	\$53,923,836	757	\$20,696,820	1,382	\$40,219,800	4,068	\$114,840,456

PLAN MEMBERS (CONTINUED)

F. Members in Pay Status - Annual Benefits (continued)

Volunteer								
Attained Age	Retired Members		Beneficiaries		Disabled Members		Current Payment Total	
	No.	Benefit	No.	Benefit	No.	Benefit	No.	Benefit
Under 50	335	\$ 589,896	72	\$ 87,336	45	\$ 54,144	452	\$ 731,376
50	96	159,024	7	11,244	7	9,984	110	180,252
51	102	164,172	12	16,512	7	9,792	121	190,476
52	98	154,368	6	8,556	10	14,400	114	177,324
53	131	214,116	14	19,524	7	9,900	152	243,540
54	117	194,964	12	18,804	7	8,544	136	222,312
55	137	229,536	5	7,728	8	10,692	150	247,956
56	136	233,148	22	34,296	7	9,612	165	277,056
57	127	221,040	6	9,720	15	20,160	148	250,920
58	113	184,704	16	24,228	16	25,644	145	234,576
59	138	232,812	19	34,500	10	10,428	167	277,740
60	117	197,736	20	33,108	10	11,856	147	242,700
61	134	229,884	17	29,856	3	5,220	154	264,960
62	139	258,636	24	39,240	17	24,204	180	322,080
63	150	271,224	24	42,600	11	17,184	185	331,008
64	124	222,432	13	23,484	17	19,512	154	265,428
65	132	238,272	23	36,084	21	32,844	176	307,200
66	130	225,228	16	27,552	14	22,080	160	274,860
67	115	208,920	29	46,980	9	13,392	153	269,292
68	111	200,856	27	48,684	5	7,548	143	257,088
69	113	207,648	18	31,680	5	6,480	136	245,808
70	89	154,812	30	52,572	13	18,708	132	226,092
71	100	176,268	31	56,088	10	16,476	141	248,832
72	88	155,568	29	49,332	4	5,664	121	210,564
73	78	143,160	40	73,380	7	12,060	125	228,600
74	64	114,732	37	67,068	8	11,340	109	193,140
75	77	139,716	25	44,028	7	9,984	109	193,728
76	67	125,112	25	44,328	9	15,036	101	184,476
77	53	99,576	34	63,924	8	12,228	95	175,728
78	76	143,160	36	64,104	1	1,344	113	208,608
79	53	100,968	28	52,668			81	153,636
80	54	101,520	37	64,080	4	6,564	95	172,164
81	50	91,548	38	68,400	2	3,696	90	163,644
82	43	80,052	41	72,012	1	1,440	85	153,504
83	46	83,640	43	74,424			89	158,064
84	33	61,128	35	63,108	1	1,800	69	126,036
85	22	40,140	33	59,580	2	2,976	57	102,696
86	23	42,960	32	58,512	2	3,240	57	104,712
87	7	13,056	20	36,540	2	3,696	29	53,292
88	17	32,508	31	54,108	3	5,136	51	91,752
89	19	35,112	28	51,492			47	86,604
90	10	18,540	22	39,876			32	58,416
Over 90	28	51,036	83	148,056	1	1,800	112	200,892
Total	3,892	\$ 6,842,928	1,160	\$ 1,989,396	336	\$ 476,808	5,388	\$ 9,309,132

PLAN MEMBERS (CONTINUED)

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

Attained Age	Paid			
	Terminated Vested Members		Deferred Option Plan Members	
	No.	Benefit	No.	Benefit
Under 40	11	\$ 120,684		
40	4	41,028	1	\$ 50,064
41	2	18,372		
42	2	17,796	1	48,984
43	2	20,532	1	38,796
44	1	19,092	1	37,848
45	1	4,992	2	78,720
46	5	83,184	3	128,772
47	3	25,464	6	247,800
48	2	19,140	4	153,828
49	4	38,604	9	329,760
50	3	10,608	7	265,332
51			7	229,188
52			6	181,284
53	1	8,448	4	152,544
54			6	201,876
55	3	20,496	4	136,092
56			5	161,088
57			5	203,088
58			5	177,984
59			4	128,520
60	2	37,932	2	91,344
61				
62				
63			2	67,236
64				
65				
66				
67				
68				
69				
70				
71 and over				
Total	46	\$ 486,372	85	\$ 3,110,148

PLAN MEMBERS (CONTINUED)

G. Terminated Vested and Deferred Option Plan Members - Annual Benefits (continued)

Volunteer				
Attained Age	Terminated Vested Members		Deferred Option Plan Members	
	No.	Benefit	No.	Benefit
Under 40	110	\$ 132,264		
40	31	40,968		
41	28	40,008		
42	33	43,716		
43	36	45,312	1	\$ 1,800
44	39	54,444		
45	48	72,252		
46	47	64,044	3	5,856
47	57	80,532	3	5,496
48	51	67,980	2	3,600
49	56	83,148	3	5,400
50	35	57,588	2	3,600
51	29	48,492	2	3,600
52	35	61,104	3	6,300
53	52	98,616	2	4,056
54	35	65,484	2	3,600
55	26	47,232	1	1,896
56	32	62,340	2	3,600
57	34	70,764	1	1,800
58	17	36,360	1	1,896
59	23	48,444	3	5,496
60	28	60,540	2	4,500
61	18	41,100		
62	15	31,752	1	2,160
63	13	27,876	1	2,700
64	9	21,540		
65	14	34,164		
66	15	34,836		
67	12	28,596		
68	12	28,776		
69	14	34,140		
70 and over	103	254,460		
Total	1,107	\$ 1,918,872	35	\$ 67,356

PLAN MEMBERS

H. Member Data Reconciliation

	Paid Members						Total
	Active Members		Inactive Members				
	Regular	Deferred Option Plan	Deferred Vested Members	Retired Members	Disabled Members	Bene-ficiaries	
As of July 1, 2009	4,079	86	44	1,893	1,340	734	8,176
Deferred Option Plan Retirees	(18)	18	-	-	-	-	-
Service Retirements	(74)	(11)	(2)	87	-	-	-
Disability Retirements	(39)	(8)	(2)	-	49	-	-
Deaths Without Beneficiaries	-	-	-	(11)	(3)	(32)	(46)
Deaths With Beneficiaries	(6)	-	-	(30)	(14)	50	-
Nonvested Terminations	(33)	-	-	-	-	-	(33)
Vested Terminations	(6)	-	6	-	-	-	-
Rehires	-	-	-	-	-	-	-
Cashouts of Member Contributions	-	-	-	-	-	-	-
Expiration of Benefits	-	-	-	-	-	-	-
Data Corrections	(25)	-	-	(10)	10	5	(20)
Transfers to Volunteer	(5)	-	-	-	-	-	(5)
Transfers from Volunteer	49	-	-	-	-	-	49
Net Change	(157)	(1)	2	36	42	23	(55)
New Entrants During the Year	77	-	-	-	-	-	77
Net Change	(80)	(1)	2	36	42	23	22
As of July 1, 2010	3,999	85	46	1,929	1,382	757	8,198

PLAN MEMBERS (CONTINUED)

H. Member Data Reconciliation (continued)

	Volunteer Members						Total
	Active Members		Inactive Members				
	Regular	Deferred Option Plan	Deferred Vested Members	Retired Members	Disabled Members	Bene-ficiaries	
As of July 1, 2009	7,994	41	1,098	3,769	330	1,143	14,375
Deferred Option Plan Retirees	(5)	5	-	-	-	-	-
Service Retirements	(147)	(11)	(45)	203	-	-	-
Disability Retirements	(11)	-	(3)	-	14	-	-
Deaths Without Beneficiaries	-	-	-	(27)	(4)	(53)	(84)
Deaths With Beneficiaries	(17)	-	-	(44)	(3)	64	-
Nonvested Terminations	(575)	-	-	-	-	-	(575)
Vested Terminations	(71)	-	71	-	-	-	-
Rehires	13	-	(12)	(1)	-	-	-
Cashouts of Member Contributions	-	-	-	-	-	-	-
Expiration of Benefits	-	-	-	-	-	-	-
Data Corrections	-	-	(2)	(8)	(1)	6	(5)
Transfers to Paid	(49)	-	-	-	-	-	(49)
Transfers from Paid	5	-	-	-	-	-	5
Net Change	(857)	(6)	9	123	6	17	(708)
New Entrants During the Year	1,039	-	-	-	-	-	1,039
Net Change	182	(6)	9	123	6	17	331
As of July 1, 2010	8,176	35	1,107	3,892	336	1,160	14,706

ACTUARIAL BASIS

A. Entry Age Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Individual Entry Age method of funding.

Sometimes called “funding method,” this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of Plan Benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan 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 plan 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 plan.

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 plan 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.

Actuarial Present Value

The current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The actuarial present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Present Value of Accrued Plan Benefit (ASC 960)

The present value of accrued Plan Benefits represents the actuarial present value of benefits which are accrued based on service and salary information as of the valuation date.

ACTUARIAL BASIS (CONTINUED)

B. Asset Valuation Method

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 Plan 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;
- 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 were included in the actuarial value of assets. Deferred Option Plan assets are not subject to this smoothing methodology; they are included at market value.

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 were considered earnings for the year ending June 30, 2010, increased by the salary scale to develop expected earnings for the current valuation year. Earnings were annualized for Members with less than twelve months of reported earnings.

In computing accrued benefits, average earnings were determined using actual pay history provided for valuation purposes.

ACTUARIAL BASIS (CONTINUED)**C. Valuation Procedures (continued)**

The impact from the dollar limitation required by the Internal Revenue Code Section 415 for governmental plans was not considered in this valuation and was determined not to be significant on a projected basis.

The compensation limitation under IRC Section 401(a)(17) was not considered in this valuation. On a projected basis, the impact of this limitation is insignificant.

The census data provided by the Retirement System was screened for completeness and validity, and discrepancies were resolved. No significant assumptions for incomplete data were necessary.

The estimated employee, employer and state contributions have been determined based on total compensation.

When the data is edited, members reported as non-vested terminations are verified to have less than ten years of service at date of termination. Members with more than ten years of service are included in the valuation with estimated benefits. Members who terminated prior to the current year with over 10 years of service were added to the valuation with estimated benefits.

The Deferred Option Plan members are valued in a manner similar to retired Members. The main difference is the continuation of 50% of the employer contributions to the Firefighters Pension and Retirement System based on the compensation rate of the Deferred Option Plan members. Thirty-two percent (32%) of active and future Deferred Option Plan members are assumed to become disabled at benefit commencement.

The normal cost is adjusted to reflect the expected cost of the guaranteed minimum interest rate on the Deferred Option Plan account balances. The adjustment is 3.28% of the DROP account balances as of the valuation date. This load was determined through a simplified stochastic modeling process in a study conducted for the Plan during 2000. This amount will be carried forward as a reserve, if applicable. This reserve will affect the actuarial accrued liability for the first time on July 1, 2001.

The contribution requirements are based on total annual compensation rather than total covered compensation. This is a better reflection of the overall expectations for the Plan.

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.

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions****Paid Firefighters****Economic Assumptions**

1. Investment Return 7.50%, net of investment expenses, per annum, compound annually.

2. Earnings Progression Sample rates below:

Years of Service	Inflation %	Merit %	Increase %
0	3.00	7.00	10.00
1	3.00	6.00	9.00
2	3.00	5.40	8.40
3	3.00	5.20	8.20
4	3.00	5.00	8.00
5	3.00	4.80	7.80
10	3.00	3.55	6.55
15	3.00	1.65	4.65
20	3.00	1.20	4.20
25+	3.00	1.00	4.00

3. Reserve for Guaranteed Interest Rate for DROP Account Balances 3.28% of DROP account balances as of the valuation date is loaded to normal cost.

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Paid Firefighters (continued)****Demographic Assumptions**

1. Retirement Rates

Sample rates below:

Attained Service	Annual Rates of Retirement Per 100 Eligible Members
20	20
21	18
22	15
23	14
24	14
25	17
26-34	25
35+	100

2. Mortality Rates

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

1994 Group Annuity Mortality Table.

- (b) Active employees
-
- (post-retirement) and
-
- non-disabled pensioners

Males - 1994 Group Annuity Mortality Table for males set forward one year.

Females - 1994 Group Annuity Mortality Table for females set back two years.

- (c) Disabled pensioners

Males - 1994 Group Annuity Mortality Table for males set forward five years.

Females - 1994 Group Annuity Mortality Table for females set forward two years.

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Paid Firefighters (continued)****Demographic Assumptions (continued)**

3. Disability Rates -

Graduated rates. See table below:

Age Range	Rate
20-24	.0005
25-29	.0010
30-34	.0030
35-39	.0040
40-44	.0045
45-49	.0105
50-54	.0280
55-59	.0490
60-64	.0900

33% of disabilities are assumed to be Non-Duty related and 67% are assumed to be Duty related.

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Paid Firefighters (continued)****Demographic Assumptions (continued)**

4. Disability from DROP 32% of DROP Members are assumed to become disabled during active DROP membership.

5. Withdrawal Rates Graduated rates. See table below:

Attained Service	Rate
0	.0350
1	.0350
2	.0300
3	.0250
4	.0200
5-9	.0100
10-14	.0080
15+	.0040

6. Marital Status

(a) Percentage married Males: 85%; Females: 85%

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

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Paid Firefighters (continued)****Other Assumptions**

1. Assumed Age of Commencement
for Deferred Benefits Later of Age 50 and 20 Years of Service.

2. Actuarial Value of Assets An expected actuarial value is determined equal to the prior year's Actuarial Value of Assets plus cash flow (excluding realized and unrealized gains and losses) for the year ended on the valuation date and assuming 7.50% interest return. Twenty percent (20%) of any (gain)/loss as measured by the difference between the expected actuarial value and the market value at the valuation date is added to the expected actuarial value. The (gain)/loss is amortized over five years. The result is constrained to a value of 80% to 120% of the market value at the valuation date. Deferred Option Plan assets are included in the actuarial value of assets. Deferred Option Plan assets are included at market value and are not subject to smoothing.

3. Provision for Expenses Administrative Expenses, as budgeted by the Oklahoma Firefighters Pension and Retirement System.

4. Cost-of-Living Allowance
Assumption for Retirees with
20 years of service as of
May 26, 1983 Half of the dollar amount of a 3% assumed increase in base pay.

5. Cost-of-Living Increase
Assumption Members are assumed to receive a 2% annual increase in benefits during each year of retirement, except for those in Item 4 above.

ACTUARIAL BASIS (CONTINUED)

- 6. Deferred Option Plan The retirement rates reflect both regular retirement and entry into the DROP. A 2.50% load is added to the liability of anticipated member joining DROP retroactively.

D. Actuarial Assumptions (continued)

Volunteer Firefighters

Economic Assumptions

- 1. Investment Return 7.50%, net of investment expenses, per annum, compound annually.
- 2. Benefit level increases No increases.

Demographic Assumptions

- 1. Retirement Rates Sample rates below:

Attained Service	Annual Rates of Retirement Per 100 Eligible Members
20	43
21	24
22	18
23	14
24	16
25	18
26-34	20
35+	100

ACTUARIAL BASIS (CONTINUED)

2. Mortality Rates

- | | |
|---|---|
| (a) Active employees
(pre-retirement) | 1994 Group Annuity Mortality Table. |
| (b) Active employees
(post-retirement) and
nondisabled pensioners | Males - 1994 Group Annuity Mortality Table for males set
forward one year.

Females - 1994 Group Annuity Mortality Table for females
set back two years. |
| (c) Disabled pensioners | Males - 1994 Group Annuity Mortality Table for males set
forward five years.

Females - 1994 Group Annuity Mortality Table for females
set forward two years. |

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Volunteer Firefighters (continued)****Demographic Assumptions (continued)**

3. Disability Rates –

Graduated rates. See table below:

Age Range	Rate
20-24	.0005
25-29	.0005
30-34	.0010
35-39	.0010
40-44	.0020
45-49	.0020
50-54	.0080
55-59	.0140
60-64	.0165

67% of disabilities are assumed to be Non-Duty related and 33% are assumed to be Duty related.

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Volunteer Firefighters (continued)****Demographic Assumptions (continued)**

4. Withdrawal Rates Graduated rates. See table below:

Attained Service	Rate
0	.1800
1	.1600
2	.1400
3	.1300
4	.1100
5-9	.0075
10-14	.0500
15+	.0300

5. Marital Status

(a) Percentage married Males: 85%; Females: 85%

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

ACTUARIAL BASIS (CONTINUED)**D. Actuarial Assumptions (continued)****Volunteer Firefighters (continued)****Other Assumptions**

1. Assumed Age of Commencement
for Deferred Benefits Later of Age 50 and 20 Years of Service.

2. Actuarial Value of Assets An expected actuarial value is determined equal to the prior year's Actuarial Value of Assets plus cash flow (excluding realized and unrealized gains and losses) for the year ended on the valuation date and assuming 7.50% interest return. Twenty percent (20%) of any (gain)/loss as measured by the difference between the expected actuarial value and the market value at the valuation date is added to the expected actuarial value plus unrecognized (gain)/loss. The (gain)/loss is amortized over five years. The result is constrained to a value of 80% to 120% of the market value at the valuation date. Deferred Option Plan assets are included in the actuarial value of assets. Deferred Option Plan assets are included at market value and are not subject to smoothing.

3. Provision for Expenses Administrative Expenses, as budgeted by the Oklahoma Firefighters Pension and Retirement System.

4. Cost-of-Living Increase
Assumption Members are assumed to receive a 2% annual increase in benefits during each year of retirement.

5. Deferred Option Plan The retirement rates reflect both regular retirement and entry into the DROP.

SUMMARY OF PLAN PROVISIONS

- Effective Date and Plan Year:** The plan became effective May 14, 1908 and is regularly amended during legislative session. The plan year is July 1 to June 30.
- Administration:** The plan is administered the Oklahoma Firefighters Pension and Retirement System Board consisting of 13 members. The Board acts as the fiduciary for investment and administration of the Plan.
- Members Included:** All paid and volunteer firefighters of participating municipalities and fire protection districts.
- Member Contributions:** Paid firefighters contribute 8% of gross salary. No employee contributions are required of volunteer firefighters.
- Employer Contributions:** Participating municipalities and fire protection districts contribute 13% of gross salary for each paid firefighter and \$60.00 per year for each volunteer firefighter. Municipalities with revenues under \$25,000 make no contribution for volunteers.
- State Contributions:** Insurance Premium Tax allocation. The fund is scheduled to receive 34% of these collected taxes.
- Service Considered:** The period of membership in the Pension System or a predecessor municipal system. Service for members of a fire protection district does not accrue before July 1, 1982.
- Military service is credited for one term (unless the member is required by law to re-enlist) if the city continues to make contributions on the member's behalf as though he were in actual service, provided that he returns to actual service within the fire department within ninety (90) days of honorable discharge. War veterans shall receive up to five years of credit for active military service.

SUMMARY OF PLAN PROVISIONS (CONTINUED)

A member who has withdrawn his contributions and later returns to membership may repay the amount withdrawn plus interest as determined by the Board to reinstate participating service which was canceled by his withdrawal.

A member may receive credit for up to five years of credited service accumulated by the member while a member of the Oklahoma Police Pension and Retirement System, the Oklahoma Law Enforcement Retirement System, the Teachers' Retirement System of Oklahoma, or the Oklahoma Public Employees Retirement System, if the member is not receiving or eligible to receive retirement credit or benefits from said service in any other public retirement system. The cost of buy-back service is determined as the actuarial present value of the benefits attributable to this service, effective January 1, 1991.

Considered Compensation:

The member's gross salary excluding overtime, payment for accumulated sick or annual leave upon termination, any uniform allowances or reimbursement of out-of-pocket expenses, but excluding any salary reductions pursuant to Section 457 or Section 414(b) of the Internal Revenue Code. Only salary on which the required contributions have been made may be considered.

Final Average Compensation:

The monthly average of the highest thirty (30) consecutive months of the last sixty (60) months of participating service.

Normal Retirement Date:

The first day following the day the member completes twenty (20) years of service, regardless of age.

Normal Retirement Benefit:Paid firefighters

A monthly benefit equal to 50% of final average compensation.

Volunteer firefighters

\$150.60 per month, effective July 1, 2008.

SUMMARY OF PLAN PROVISIONS (CONTINUED)

Late Retirement Benefit:	Benefits continue to accrue for service up to thirty (30) years at the following rates:
<u>Paid firefighters</u>	2.5% of final average compensation per year of service.
<u>Volunteer firefighters</u>	\$7.53 per month per year of service, effective July 1, 2008.
Early Retirement Benefit:	None.
Disability or Death Benefit:	All firefighters are eligible for immediate disability or death benefits. Disabilities due to heart disease, injury to the respiratory system, or cancer are considered in the line of duty. If there is no eligible surviving spouse, the death benefit is divided between the children under age 18 or age 22 if children are enrolled as full-time students.
<u>Paid firefighters</u>	2.5% of final average monthly compensation per year of service, with a minimum service credit of 20 years and maximum of 30 years. For disabilities not in the line of duty, final average monthly compensation is based on 60 months instead of 30 months.
<u>Volunteer firefighters</u>	\$7.53 per month per year of service, with a maximum of 30 years. For disabilities or deaths in the line of duty, there is a minimum service credit of 20 years.

SUMMARY OF PLAN PROVISIONS (CONTINUED)

- Vested Severance Benefit:** A member who terminates after ten years of credited service is eligible for a vested severance benefit determined by the normal retirement formula, based on service and salary history to date of termination.
- The benefit is payable at age 50 or when the member would have completed twenty years of service, whichever is later, provided the member's contribution accumulation is not withdrawn.
- Members terminating with less than ten years of credited service receive a refund of their contribution accumulation without interest.
- Lump Sum Death Benefit:** Upon the death of an active or retired member on or after July 1, 1999, a \$5,000 lump sum death benefit will be paid to the member's beneficiary, or estate if no beneficiary. The \$5,000 death benefit does not apply to members electing the vested benefit.
- Form of Payments:** The normal form of benefit is a Joint and 100% Survivor Annuity if the firefighter was married 30 months prior to death.
- Post-Retirement Adjustments:** Firefighters with 20 years of service as of May 26, 1983, are entitled to post-retirement adjustments equal to one-half the increase or decrease for top step firefighters. Pensions will not be adjusted below the level at which the firefighter retired.
- 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 (DROP). Participation in the DROP 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 DROP. The monthly retirement benefits that the employee is eligible to receive are paid into the DROP account.

SUMMARY OF PLAN PROVISIONS (CONTINUED)

A member is also allowed to retroactively elect to join the DROP 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 DROP are credited to the member's DROP account with interest.

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

When the Member actually terminates employment, the DROP 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.

The DROP 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, 2010 ACTUARIAL VALUATION

CERTIFICATION

We have prepared a supplemental actuarial valuation of the Oklahoma Firefighters Pension and Retirement System as of July 1, 2010, for the plan year ending June 30, 2010 as required by State statutes. 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, 2010.

The valuation is based on employee and financial data which were provided by the Oklahoma Firefighters 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 Commission, based on the following prescribed assumptions (11 O.S. 2001, Section 49-100.9, Section H):

Interest rate: 7.50%
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, 2010 valuation. The Retirement Board chose these other assumptions and we believe these other assumptions are reasonable.


The results shown in this Addendum are not consistent with those in the July 1, 2010 valuation. The July 1, 2010 valuation results were determined in accordance with generally accepted actuarial principles and procedures, and are in compliance with the Actuarial Standards of Practice. 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, 2010 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.



RICHARD A. MACKESEY, FSA, EA, MAAA

October 8, 2010



DAVID KENT, FSA, EA, MAAA

October 8, 2010

This supplemental report has been prepared by Buck Consultants, LLC for the Oklahoma Firefighters Retirement Board to present the results of a valuation of the Oklahoma Firefighters Pension and Retirement System as of July 1, 2010, based on the prescribed assumptions under 11 O.S. 2001, Section 49-100.9, 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, 2010
Summary of Costs		
Required State Contribution for Current Year under Prescribed Assumptions ⁽¹⁾		\$ 147,075,811
Actual State Contribution Received in Prior Year		\$ 54,159,341
Funded Status		
Actuarial Accrued Liability		\$ 3,090,215,181
Actuarial Value of Assets		\$ 1,681,531,081
Unfunded Actuarial Accrued Liability		\$ 1,408,684,100
Market Value of Assets and Additional Liabilities		
Market Value of Assets		\$ 1,479,895,818
Present Value of Projected System Benefits		\$ 3,734,908,883

⁽¹⁾ The System is scheduled to receive 34% of collected state-wide insurance premium taxes.

Summary of Contribution Requirements	Actuarial Valuation as of	
	July 1, 2010	
	Amount	% of Covered Comp.
1. Annual Compensation		
a. Members included in Valuation (Covered Compensation)	\$ 248,520,483	N/A
b. Deferred Option Plan Members	\$ 6,270,151	N/A
c. Total Compensation	\$ 254,790,634	N/A
2. Total Normal Cost Mid-year	\$ 83,622,073	33.6%
3. Unfunded Actuarial Accrued Liability	\$ 1,408,684,100	N/A
4. Amortization of Unfunded Actuarial Accrued Liability over 30 years from July 1, 2010 at mid-year	\$ 115,039,048	46.3%
5. Budgeted Expenses	\$ 1,503,162	0.6%
6. Total Required Contribution under Prescribed Assumptions (2 + 4 + 5)	\$ 200,164,283	80.5%
7. Estimated Member Contribution	\$ 19,881,639	8.0%
8. Estimated Employer Contribution		
a. Active Members – Paid	\$ 32,307,663	13.0%
b. Deferred Option Plan Members – Paid	\$ 407,560	6.5% ⁽¹⁾
c. Active Members – Volunteer	\$ 490,560	N/A
d. Deferred Option Plan Members – Volunteer	\$ 1,050	N/A
e. Total	\$ 33,206,833	13.0% ⁽²⁾
9. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 2010. (6 – 7 – 8e)	\$ 147,075,811	59.2%

⁽¹⁾ Percentage of Deferred Option Plan Compensation.

⁽²⁾ Percentage of Total Compensation.

UNFUNDED ACTUARIAL ACCRUED LIABILITY

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

	Total Plan
	July 1, 2010
1. Actuarial Present Value of Benefits	
a. Active Members	\$ 1,797,678,474
b. Members with Deferred Benefits	28,592,618
c. Members Receiving Benefits who are eligible for Automatic COLA	267,972,890
d. Members Receiving Benefits who are not eligible for Automatic COLA	1,275,048,731
e. Deferred Option Plan Members ⁽¹⁾	365,616,170
f. COLA Reserve	0
g. Total	\$ 3,734,908,883
2. Actuarial Present Value of Future Normal Costs	\$ 644,693,702
3. Total Actuarial Accrued Liability (1g - 2)	\$ 3,090,215,181
4. Actuarial Value of Assets	\$ 1,681,531,081
5. Unfunded Actuarial Accrued Liability (3 - 4, not less than \$0)	\$ 1,408,684,100

⁽¹⁾ Effective July 1, 1997, Deferred Option Account balances are included as liability and assets. The total Account Balance on July 1, 2010, is \$315,107,044 and the balance used on July 1, 2009, is \$293,390,473.

LIABILITY DETAIL

Total	
Present Value of Benefits	\$ 3,734,908,883
Present Value of Future Normal Cost	\$ 644,693,702
Accrued Liability	\$ 3,090,215,181
Normal Cost Mid-year	\$ 83,622,073

Active	
a. Retirement	\$ 1,118,402,946
b. Withdrawal	7,926,055
c. Disability	9,439,356
d. Death	17,216,415
e. Total	\$ 1,152,984,772
Inactive	
1. Members Eligible for Automatic COLA	
a. Disabled Members	\$ 61,394,494
b. Beneficiaries	92,469,527
c. Retired Members	114,108,869
d. Total	\$ 267,972,890
2. Members Not Eligible for Automatic COLA	
a. Terminated Vested Members	\$ 28,592,618
b. Disabled Members	469,419,591
c. Beneficiaries	116,471,221
d. Retired Members	689,157,919
e. Deferred Option Plan Members – Annuity	50,509,126
f. Deferred Option Plan Members – Account Balances	315,107,044
g. Total	\$ 1,669,257,519
3. Total Inactive (1d + 2g)	\$ 1,937,230,409
4. COLA Reserve	\$ 0
Accrued Liability (Active + Inactive + COLA Reserve)	\$ 3,090,215,181

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 Section 4.1 of the valuation report. The valuation is based on the premise that the Plan will continue in existence.

Paid Firefighters

Economic Assumptions

1. Investment Return 7.50%, net of investment expenses, per annum, (Prescribed) compound annually

2. Earnings Progression Sample rates below:

Years of Service	Inflation %	Merit %	Increase %
0	3.00	7.00	10.00
1	3.00	6.00	9.00
2	3.00	5.40	8.40
3	3.00	5.20	8.20
4	3.00	5.00	8.00
5	3.00	4.80	7.80
10	3.00	3.55	6.55
15	3.00	1.65	4.65
20	3.00	1.20	4.20
25+	3.00	1.00	4.00

3. Reserve for Guaranteed Interest Rate for DROP Account Balances 3.28% of DROP account balances as of the valuation date is loaded to normal cost.

Paid Firefighters (continued)

Demographic Assumptions

1. Retirement Rates

Sample rates below:

Attained Service	Annual Rates of Retirement Per 100 Eligible Members
20	20
21	18
22	15
23	14
24	14
25	17
26-34	25
35+	100

2. Mortality Rates

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

RP-2000 Generational Mortality Table - Employees

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

RP-2000 Generational Mortality Table – Healthy Annuitants (except before age 50 uses Employees Mortality)

- (c) Disabled pensioners (Prescribed)

RP-2000 Generational Disabled Mortality Table

Paid Firefighters (continued)

Demographic Assumptions (continued)

3. Disability Rates –

Graduated rates. See table below:

Age Range	Rate
20-24	.0005
25-29	.0010
30-34	.0030
35-39	.0040
40-44	.0045
45-49	.0105
50-54	.0280
55-59	.0490
60-64	.0900

33% of disabilities are assumed to be Non-Duty related and 67% are assumed to be Duty related.

Paid Firefighters (continued)

Demographic Assumptions (continued)

- 4. Disability from DROP 32% of DROP Members are assumed to become disabled during active DROP membership.
- 5. Withdrawal Rates Graduated rates. See table below:

Attained Service	Rate
0	.0350
1	.0350
2	.0300
3	.0250
4	.0200
5-9	.0100
10-14	.0080
15+	.0040

- 6. Marital Status
 - (a) Percentage married Males: 85%; Females: 85%
 - (b) Age difference Males are assumed to be three years older than females.

Paid Firefighters (continued)**Other Assumptions**

1. Assumed Age of Commencement for Deferred Benefits Later of Age 50 and 20 Years of Service.
2. Actuarial Value of Assets An expected actuarial value is determined equal to the prior year's Actuarial Value of Assets plus cash flow (excluding realized and unrealized gains and losses) for the year ended on the valuation date and assuming 7.50% interest return. Twenty percent (20%) of any (gain)/loss as measured by the difference between the expected actuarial value and the market value at the valuation date is added to the expected actuarial value. The (gain)/loss is amortized over five years. The result is constrained to a value of 80% to 120% of the market value at the valuation date. Deferred Option Plan assets are included in the actuarial value of assets. Deferred Option Plan assets are included at market value and are not subject to smoothing.
3. Provision for Expenses Administrative Expenses, as budgeted by the Oklahoma Firefighters Pension and Retirement System.
4. Cost-of-Living Assumption (Prescribed) 2% annually.
5. Deferred Option Plan The retirement rates reflect both regular retirement and entry into the DROP. A 2.50% load is added to the liability of anticipated member joining DROP retroactively.

Volunteer Firefighters

Economic Assumptions

- 1. Investment Return 7.50%, net of investment expenses, per annum, (Prescribed) compound annually.
- 2. Benefit level increases No increases.

Demographic Assumptions

- 1. Retirement Rates Sample rates below:

Attained Service	Annual Rates of Retirement Per 100 Eligible Members
20	43
21	24
22	18
23	14
24	16
25	18
26-34	20
35+	100

Volunteer Firefighters (continued)

Demographic Assumptions (continued)

2. Mortality Rates

- (a) Active employees (pre-retirement) (Prescribed) RP-2000 Generational Mortality Table - Employees
- (b) Active employees (post-retirement and nondisabled pensioners) (Prescribed) RP-2000 Generational Mortality Table – Healthy Annuitants (except before age 50 uses Employees Mortality)
- (c) Disabled pensioners (Prescribed) RP-2000 Generational Disabled Mortality Table

3. Disability Rates –

Graduated rates. See table below:

Age Range	Rate
20-24	.0005
25-29	.0005
30-34	.0010
35-39	.0010
40-44	.0020
45-49	.0020
50-54	.0080
55-59	.0140
60-64	.0165

67% of disabilities are assumed to be Non-Duty related and 33% are assumed to be Duty related.

Volunteer Firefighters (continued)

Demographic Assumptions (continued)

4. Withdrawal Rates

Graduated rates. See table below:

Attained Service	Rate
0	.1800
1	.1600
2	.1400
3	.1300
4	.1100
5-9	.0075
10-14	.0500
15+	.0300

5. Marital Status

(a) Percentage married

Males: 85%; Females: 85%

(b) Age difference

Males are assumed to be three years older than females.

Volunteer Firefighters (continued)**Other Assumptions**

1. Assumed Age of Commencement for Deferred Benefits Later of Age 50 and 20 Years of Service.

2. Actuarial Value of Assets An expected actuarial value is determined equal to the prior year's Actuarial Value of Assets plus cash flow (excluding realized and unrealized gains and losses) for the year ended on the valuation date and assuming 7.50% interest return. Twenty percent (20%) of any (gain)/loss as measured by the difference between the expected actuarial value and the market value at the valuation date is added to the expected actuarial value. The (gain)/loss is amortized over five years. The result is constrained to a value of 80% to 120% of the market value at the valuation date. Deferred Option Plan assets are included in the actuarial value of assets. Deferred Option Plan assets are included at market value and are not subject to smoothing.

3. Provision for Expenses Administrative Expenses, as budgeted by the Oklahoma Firefighters Pension and Retirement System.

4. Deferred Option Plan The retirement rates reflect both regular retirement and entry into the DROP.