

**OKLAHOMA FIREFIGHTERS  
PENSION AND RETIREMENT SYSTEM**

**ACTUARIAL VALUATION REPORT  
AS OF JULY 1, 2012**

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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, 2012;
- Review experience under the Plan for the year ended June 30, 2012; and
- Provide reporting and disclosure information for auditors' reports, governmental agencies and other interested parties.

**The main financial highlights are:**

- The funded status of the Plan, on a GASB No. 25 basis, has decreased since the prior valuation as indicated by the table below:

| <b>GASB No. 25 Funded Status (\$000,000)</b> | <b>July 1, 2012</b> | <b>July 1, 2011</b> |
|--|---------------------|---------------------|
| Accrued Liability                            | \$ 2,886.4          | \$ 2,760.3          |
| Actuarial Value of Assets                    | \$ 1,759.1          | \$ 1,757.8          |
| Unfunded Accrued Liability                   | \$ 1,127.3          | \$ 1,002.5          |
| Funded Ratio                                 | 60.9%               | 63.7%               |

- 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, decreased from 67.0% to 62.7%.
- The total required contribution for the System increased by 11.0% and the required State contribution increased by 13.8%.

| <b>Contribution Summary (\$000,000)</b> | <b>July 1, 2012</b> | <b>July 1, 2011</b> |
|---|---------------------|---------------------|
| Total Required Contribution             | \$ 179.6            | \$ 161.8            |
| Expected Employee Contributions         | (20.5)              | (19.5)              |
| Expected Municipality Contributions     | (34.3)              | (32.6)              |
| Required State Contribution             | \$ 124.8            | \$ 109.7            |
| --As a Percentage of Active Payroll     | 48.7%               | 45.0%               |

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, 2012              | July 1, 2011   |
| <b>Summary of Costs</b>                                   |                           |                |
| Total Contribution Requirement <sup>(1)</sup>             | \$ 179,596,631            | \$ 161,852,334 |
| Total Contributions Received in Prior Year <sup>(2)</sup> | \$ 120,488,902            | \$ 110,691,346 |

| <b>GASB No. 25 Funded Status</b>     |                  |                  |
|--------------------------------------|------------------|------------------|
| Actuarial Accrued Liability          | \$ 2,886,447,731 | \$ 2,760,356,036 |
| Actuarial Value of Assets            | \$ 1,759,145,750 | \$ 1,757,838,480 |
| Unfunded Actuarial Accrued Liability | \$ 1,127,301,981 | \$ 1,002,517,556 |

| <b>Market Value of Assets and Additional Liabilities</b>       |                  |                  |
|--|------------------|------------------|
| Market Value of Assets   | \$ 1,709,234,969 | \$ 1,744,097,678 |
| Actuarial Present Value of Accumulated Plan Benefits (ASC 960) | \$ 2,724,383,265 | \$ 2,603,104,792 |
| Present Value of Projected Plan Benefits                       | \$ 3,420,183,168 | \$ 3,259,262,862 |

| <b>Summary of Data</b>         |               |               |
|--------------------------------|---------------|---------------|
| Number of Members in Valuation |               |               |
| Active Paid Members            | 4,050         | 4,049         |
| Active Volunteer Members       | 8,293         | 8,409         |
| Members with Deferred Benefits | 1,310         | 1,283         |
| Retired Members                | 5,960         | 5,775         |
| Beneficiaries                  | 1,947         | 1,932         |
| Disabled Members               | 1,791         | 1,757         |
| Deferred Option Plan Members   | 107           | 119           |
| <b>Total</b>                   | <b>23,458</b> | <b>23,324</b> |

| <b>Active Member Statistics</b>                         |                |                |
|---|----------------|----------------|
| Total Annual Compensation (Paid Members) <sup>(3)</sup> | \$ 256,250,268 | \$ 243,684,122 |
| Average Compensation (Paid Members) <sup>(3)</sup>      | \$ 63,272      | \$ 60,184      |
| Average Age   | 38.5           | 38.4           |
| Average Service   | 9.3            | 9.2            |

<sup>(1)</sup> Excluding Deferred Option Plan Contributions.

<sup>(2)</sup> 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.

<sup>(3)</sup> Compensation is projected one year based on the salary increase assumptions

## Legislative Changes

None with an actuarial impact.

## Changes in Actuarial Assumptions

There were no changes to assumptions or methods since the prior valuation. See Section 4.2 for more detail.

## Changes in Actuarial Funding Methods

There were no changes in actuarial funding methods.

## Changes in System Benefits

There were no changes in plan provisions or system benefits with an actuarial impact as of July 1, 2012.

## Actuarial Experience During the Plan Year

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

|                                  | Total (000s)        |
|----------------------------------|---------------------|
| Liability Gain                   | \$ (12,685)         |
| Asset Gain                       | \$ (88,439)         |
| <b>Net Actuarial Gain/(Loss)</b> | <b>\$ (101,124)</b> |

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, 2012 was 7.5%.

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

| <b>DROP Statistics</b>                       | <b>July 1, 2012</b> | <b>July 1, 2011</b> |
|--|---------------------|---------------------|
| Number of Members                            |                     |                     |
| Active                                       | 107                 | 119                 |
| Inactive                                     | 1,737               | 1,611               |
| <b>Total</b>                                 | 1,844               | 1,730               |
| Account Balances                             | \$ 420,412,628      | \$ 376,705,525      |
| Annual Retirement Benefits of Active Members | \$ 3,504,300        | \$ 3,527,808        |

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

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

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

### **Actuarial Certification**

The 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 members of the American Academy of Actuaries, and 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.

/s/DAVID KENT

/s/DOUGLAS J. FIDDLER

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Dated: October 15, 2012

**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, 2012              |                      | July 1, 2011     |                      |
|   | Amount                    | % of Covered Comp.   | Amount           | % of Covered Comp.   |
| 1. Annual Compensation  |                           |                      |                  |                      |
| a. Members included in Valuation (Covered Compensation)   | \$ 256,250,268            |                      | \$ 243,684,122   |                      |
| b. Deferred Option Plan Members   | 6,930,876                 |                      | 6,623,413        |                      |
| c. Total Compensation   | 263,181,144               |                      | 250,307,535      |                      |
| 2. Total Normal Cost Mid-year   | \$ 73,394,893             | 28.6%                | \$ 69,065,987    | 28.3%                |
| 3. Unfunded Actuarial Accrued Liability   | \$ 1,127,301,981          |                      | \$ 1,002,517,556 |                      |
| 4. Amortization of Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 Mid-year <sup>(1)</sup>                           | \$ 104,409,529            | 40.7%                | \$ 91,070,585    | 37.4%                |
| 5. Budgeted Expenses  | \$ 1,792,209              | 0.7%                 | \$ 1,715,762     | 0.7%                 |
| 6. Total Required Contribution (2 + 4 + 5)  | \$ 179,596,631            | 70.1%                | \$ 161,852,334   | 66.4%                |
| 7. Estimated Member Contribution  | \$ 20,500,021             | 8.0%                 | \$ 19,494,730    | 8.0%                 |
| 8. Estimated Employer Contribution  |                           |                      |                  |                      |
| a. Active Members – Paid  | \$ 33,312,535             | 13.0%                | \$ 31,678,936    | 13.0%                |
| b. Deferred Option Plan Members – Paid  | 450,507                   | 6.5% <sup>(2)</sup>  | 430,522          | 6.5% <sup>(2)</sup>  |
| c. Active Members - Volunteer   | 497,580                   |                      | 504,540          |                      |
| d. Deferred Option Plan Members – Volunteer   | 720                       |                      | 930              |                      |
| e. Total  | \$ 34,261,342             | 13.0% <sup>(3)</sup> | \$ 32,614,928    | 13.0% <sup>(3)</sup> |
| 9. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 at Mid-year. (6 - 7 - 8e) | \$ 124,835,268            | 48.7%                | \$ 109,742,676   | 45.0%                |
| 10. Previous year's actual State Contribution <sup>(4)</sup>  | \$ 68,245,816             | 26.6%                | \$ 59,876,295    | 24.6%                |

<sup>(1)</sup> Funding Policy adopted by Board.

<sup>(2)</sup> Percentage of Deferred Option Plan Compensation.

<sup>(3)</sup> Percent of Total Compensation.

<sup>(4)</sup> 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, 2012   |              |                |
|--|----------------|--------------|----------------|
|  | Paid           | Volunteer    | Total          |
| 1. Total Normal Cost Mid-year  | \$ 70,712,593  | \$ 2,682,300 | \$ 73,394,893  |
| 2. Unfunded Actuarial Accrued Liability <sup>(1)</sup>   | 1,058,157,955  | 69,144,026   | 1,127,301,981  |
| 3. Amortization of Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 Mid-year <sup>(2)</sup>                          | 98,005,482     | 6,404,047    | 104,409,529    |
| 4. Budgeted Expenses <sup>(3)</sup>  | 1,682,282      | 109,927      | 1,792,209      |
| 5. Total Required Contribution (1 + 3 + 4)   | \$ 170,400,357 | \$ 9,196,274 | \$ 179,596,631 |
| 6. Estimated Member Contribution   | 20,500,021     | 0            | 20,500,021     |
| 7. Estimated Employer Contribution   |                |              |                |
| a. Active Members  | 33,312,535     | 497,580      | 33,810,115     |
| b. Deferred Option Plan Members  | 450,507        | 720          | 451,227        |
| c. Total   | \$ 33,763,042  | \$ 498,300   | \$ 34,261,342  |
| 8. Required State Contribution to amortize Unfunded Actuarial Accrued Liability over 30 years from July 1, 2003 at Mid-year (5 - 6 - 7c) | \$ 116,137,294 | \$ 8,697,974 | \$ 124,835,268 |

<sup>(1)</sup> See Section 1.3 for allocation.

<sup>(2)</sup> Funding Policy Adopted by Board.

<sup>(3)</sup> Allocation based on total Actuarial Accrued Liability.

## LIABILITY DETAIL

|  |                  |
|--|------------------|
| <b>Total</b>                               |                  |
| <b>Present Value of Benefits</b>           | \$ 3,420,183,168 |
| <b>Present Value of Future Normal Cost</b> | \$ 533,735,437   |
| <b>Accrued Liability</b>                   | \$ 2,886,447,731 |
| <b>Normal Cost Mid-year</b>                | \$ 73,394,893    |

|  |                         |
|--|-------------------------|
| <b>Active</b>                                      |                         |
| a. Retirement                                      | \$ 926,114,060          |
| b. Withdrawal                                      | 6,528,623               |
| c. Disability                                      | 8,612,567               |
| d. Death   | 12,733,776              |
| e. Total   | \$ 953,989,026          |
| <b>Inactive</b>                                    |                         |
| 1. Members Eligible for Automatic COLA             |                         |
| a. Disabled Members                                | \$ 61,852,161           |
| b. Beneficiaries                                   | 101,207,879             |
| c. Retired Members                                 | 108,103,050             |
| d. Total   | \$ 271,163,090          |
| 2. Members Not Eligible for Automatic COLA         |                         |
| a. Terminated Vested Members                       | 29,323,523              |
| b. Disabled Members                                | 431,906,995             |
| c. Beneficiaries                                   | 117,334,883             |
| d. Retired Members                                 | 618,088,938             |
| e. Deferred Option Plan Members - Annuity          | 44,228,648              |
| f. Deferred Option Plan Members - Account Balances | 420,412,628             |
| g. Total   | \$ 1,661,295,615        |
| 3. Total Inactive (1d + 2g)                        | \$ 1,932,458,705        |
| <b>Accrued Liability (Active + Inactive)</b>       | <b>\$ 2,886,447,731</b> |

## 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, 2012     | July 1, 2011     |
| 1. Actuarial Present Value of Benefits                                |                  |                  |
| a. Active Members   | \$ 1,487,724,463 | \$ 1,425,299,195 |
| b. Members with Deferred Benefits                                     | 29,323,523       | 26,062,242       |
| c. Members Receiving Benefits who are eligible for Automatic COLA     | 271,163,090      | 286,463,128      |
| d. Members Receiving Benefits who are not eligible for Automatic COLA | 1,167,330,816    | 1,100,298,395    |
| e. Deferred Option Plan Members <sup>(1)</sup>                        | 464,641,276      | 421,139,902      |
| f. Total  | 3,420,183,168    | 3,259,262,862    |
| 2. Actuarial Present Value of Future Normal Costs                     | \$ 533,735,437   | \$ 498,906,826   |
| 3. Total Actuarial Accrued Liability ( <i>If - 2</i> )                | \$ 2,886,447,731 | \$ 2,760,356,036 |
| 4. Actuarial Value of Assets  | \$ 1,759,145,750 | \$ 1,757,838,480 |
| 5. Unfunded Actuarial Accrued Liability<br>(3 - 4, not less than \$0) | \$ 1,127,301,981 | \$ 1,002,517,556 |

### Allocation of Current Year Between Paid and Volunteer:

|   | Total Plan       |                |                  |
|---|------------------|----------------|------------------|
|   | Paid             | Volunteer      | Total            |
| 1. Actuarial Present Value of Benefits                                |                  |                |                  |
| a. Active Members   | \$ 1,422,949,972 | \$ 64,774,491  | \$ 1,487,724,463 |
| b. Members with Deferred Benefits                                     | 8,200,305        | 21,123,218     | 29,323,523       |
| c. Members Receiving Benefits who are eligible for Automatic COLA     | 271,163,090      | 0              | 271,163,090      |
| d. Members Receiving Benefits who are not eligible for Automatic COLA | 1,061,948,793    | 105,382,023    | 1,167,330,816    |
| e. Deferred Option Plan Members <sup>(1)</sup>                        | 464,053,931      | 587,345        | 464,641,276      |
| f. Total  | \$ 3,228,316,091 | \$ 191,867,077 | \$ 3,420,183,168 |
| 2. Actuarial Present Value of Future Normal Costs                     | \$ 518,911,086   | \$ 14,824,351  | \$ 533,735,437   |
| 3. Total Actuarial Accrued Liability ( <i>If - 2</i> )                | \$ 2,709,405,005 | \$ 177,042,726 | \$ 2,886,447,731 |
| 4. Actuarial Value of Assets <sup>(2)</sup>                           | \$ 1,651,247,050 | \$ 107,898,700 | \$ 1,759,145,750 |
| 5. Unfunded Actuarial Accrued Liability<br>(3 - 4, not less than \$0) | \$ 1,058,157,955 | \$ 69,144,026  | \$ 1,127,301,981 |

<sup>(1)</sup> Effective July 1, 1997, Deferred Option Account balances are included as liability and assets. The total Account Balance on July 1, 2012, is \$420,412,628 and the balance used on July 1, 2011, is \$376,705,825.

<sup>(2)</sup> 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, 2012.

|   | Regular          | Deferred Option | Total            |
|---|------------------|-----------------|------------------|
| 1. Expected Actuarial Accrued Liability   |                  |                 |                  |
| a. Actuarial Accrued Liability at July 1, 2011  | \$ 2,383,650,511 | \$ 376,705,525  | \$ 2,760,356,036 |
| b. Normal Cost at July 1, 2011  | 54,696,025       | 0               | 54,696,025       |
| c. Reserve for DROP Interest Rate Guarantee and DROP Contribution at Mid-Year           | 5,033,809        | 7,322,132       | 12,355,941       |
| d. Benefit Payments for Plan Year Ending June 30, 2012                                  | 157,891,564      | 1,469,785       | 159,361,349      |
| e. Interest on a + b + c - d to End of Year   | 177,247,452      | 28,468,410      | 205,715,862      |
| f. Cost of Assumption Change  | 0                | 0               | 0                |
| g. Plan Changes   | 0                | 0               | 0                |
| h. Expected Actuarial Accrued Liability at July 1, 2012 ( $a + b + c - d + e + f + g$ ) | \$ 2,462,736,233 | \$ 411,026,282  | \$ 2,873,762,515 |
| 2. Actuarial Accrued Liability at July 1, 2012  | \$ 2,466,035,103 | \$ 420,412,628  | \$ 2,886,447,731 |
| 3. Actuarial Liability Gain/(Loss) ( $1h - 2$ )   | \$ (3,298,870)   | \$ (9,386,346)  | \$ (12,685,216)  |
| 4. Expected Actuarial Value of Assets   |                  |                 |                  |
| a. Actuarial Value of Assets at July 1, 2011  | \$ 1,381,132,955 | \$ 376,705,525  | \$ 1,757,838,480 |
| b. Contributions Made for Plan Year Ending June 30, 2012                                | 113,166,770      | 7,322,132       | 120,488,902      |
| c. Benefit Payments and Expenses for Plan Year Ending June 30, 2012                     | 159,616,345      | 1,469,785       | 161,086,130      |
| d. Interest on a + b - c to End of Year   | 101,874,602      | 28,468,410      | 130,343,012      |
| e. Expected Actuarial Value of Assets at July 1, 2012 ( $a + b - c + d$ )               | \$ 1,436,557,982 | \$ 411,026,282  | \$ 1,847,584,264 |
| 5. Actuarial Value of Assets as of July 1, 2012   |                  |                 |                  |
| a. Actuarial Value of Assets as of July 1, 2012 prior to DROP transfer                  | \$ 1,366,100,732 | \$ 393,045,018  | \$ 1,759,145,750 |
| b. DROP transfer  | (27,367,710)     | 27,367,610      | 0                |
| c. Actuarial Value of Assets as of July 1, 2012 after DROP transfer                     | \$ 1,338,733,122 | \$ 420,412,628  | \$ 1,759,145,750 |
| 6. a. Actuarial Asset Gain/(Loss) Before DROP Transfer ( $5a-4e$ )                      | \$ (70,457,250)  | \$ (17,981,264) | \$ (88,438,514)  |
| b. Actuarial Asset Gain/(Loss) After DROP Transfer ( $5c-4e$ )                          | \$ (97,824,860)  | \$ 9,386,346    | \$ (88,438,514)  |
| 7. Summary  |                  |                 |                  |
| a. Actuarial Asset Gain/(Loss) ( $6a$ )   | \$ (70,457,250)  | \$ (17,981,264) | \$ (88,438,514)  |
| b. DROP Guarantee Gain/(Loss) ( $5b$ )  | (27,367,710)     | 27,367,710      | 0                |
| c. Actuarial Liability Gain/(Loss) ( $3$ )  | (3,298,870)      | (9,386,346)     | (12,685,216)     |
| d. Total Actuarial Gain/(Loss) ( $a + b + c$ )  | \$ (101,123,730) | \$ 0            | \$ (101,123,730) |

## CONTRIBUTIONS

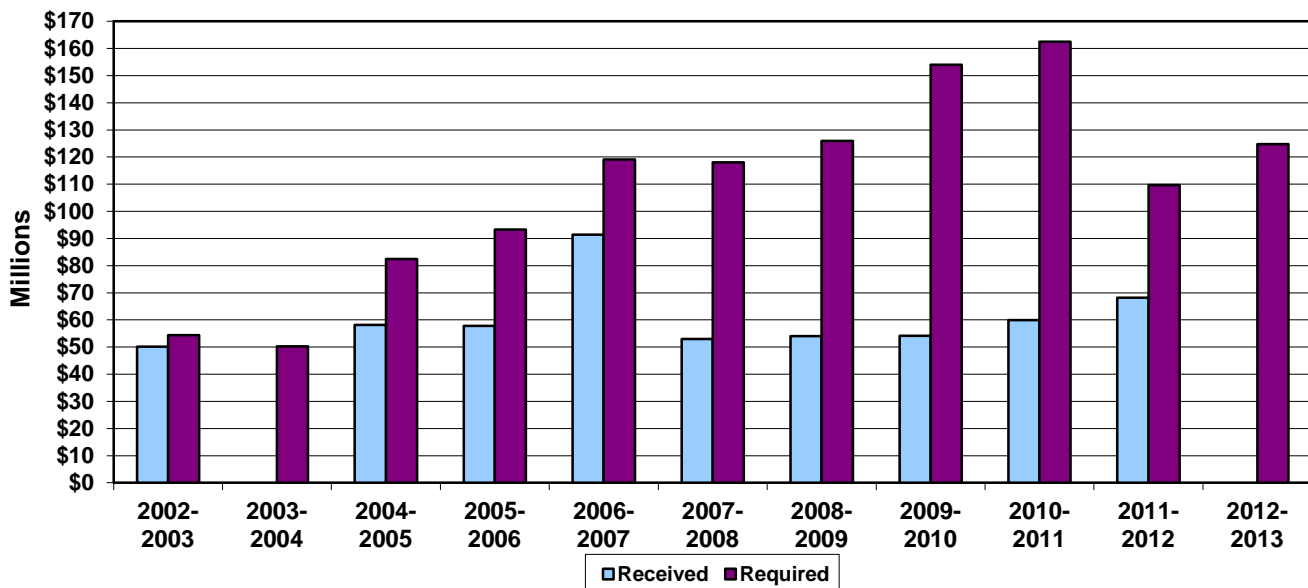
Contributions to the Retirement System are made by the Members, municipalities, fire districts, and the State of Oklahoma.

Paid firefighters contribute 8% of gross salary. Municipalities and fire districts contribute 13.0% of gross salary. For the fiscal year ending June 30, 2012, the fund received a contribution of \$68,245,816 from the State. The Retirement 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 Fund. However, municipalities continue contributing for them, with 50% of the contribution going to 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<sup>(1)</sup>**



<sup>(1)</sup> 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  
(RETIREMENT BENEFIT PAYMENTS)**

| <b>Plan Year Ending</b> | <b>Actives</b> | <b>Retirees <sup>(1)</sup></b> | <b>Total</b> |
|-------------------------|----------------|--------------------------------|--------------|
| 6/30/2013               | 6,506,663      | 137,103,454                    | 143,610,117  |
| 6/30/2014               | 16,814,213     | 136,753,057                    | 153,567,270  |
| 6/30/2015               | 27,197,645     | 136,139,202                    | 163,336,847  |
| 6/30/2016               | 37,501,689     | 135,391,494                    | 172,893,183  |
| 6/30/2017               | 47,479,968     | 134,439,633                    | 181,919,401  |
| 6/30/2018               | 57,125,013     | 133,243,209                    | 190,368,222  |
| 6/30/2019               | 66,176,895     | 131,898,767                    | 198,075,662  |
| 6/30/2020               | 75,448,239     | 130,308,051                    | 205,756,290  |
| 6/30/2021               | 84,692,675     | 128,486,804                    | 213,179,479  |
| 6/30/2022               | 93,634,414     | 126,469,819                    | 220,104,233  |

<sup>(1)</sup> Includes Deferred Option Plan Members, Disabled Members, Beneficiaries and Terminated Vested Members.

**Section 2.1** ASC 960 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. 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.

| <b>Accumulated Plan Benefits</b>              | <b>July 1, 2012</b>     | <b>July 1, 2011</b>     |
|---|-------------------------|-------------------------|
| Vested Benefits                               |                         |                         |
| a. Active Members                             | \$ 699,474,445          | \$ 682,065,177          |
| b. Deferred Option Plan Members               | 464,641,276             | 421,139,902             |
| c. Members with Deferred Benefits             | 29,323,523              | 26,062,242              |
| d. Members Receiving Benefits                 | 1,438,493,906           | 1,386,761,523           |
| e. Total Vested Benefits                      | \$ 2,631,933,150        | \$ 2,516,028,844        |
| Nonvested Benefits                            | 92,450,115              | 87,075,948              |
| <b>Total Accumulated Plan Benefits</b>        | <b>\$ 2,724,383,265</b> | <b>\$ 2,603,104,792</b> |
| Assumed Rate of Interest                      | 7.5%                    | 7.5%                    |
| Market Value of Assets Available for Benefits | \$ 1,709,234,969        | \$ 1,744,097,678        |
| Funded Ratio                                  | 62.74%                  | 67.00%                  |

|                                   | <b>July 1, 2012</b> | <b>July 1, 2011</b> |
|-----------------------------------|---------------------|---------------------|
| Vested Members                    |                     |                     |
| a. Active Members                 | 4,959               | 5,048               |
| b. Deferred Option Plan Members   | 107                 | 119                 |
| c. Members with Deferred Benefits | 1,310               | 1,283               |
| d. Members Receiving Benefits     | 9,698               | 9,464               |
| e. Total Vested Members           | 16,074              | 15,914              |
| Nonvested Members                 | 7,384               | 7,410               |
| <b>Total Members</b>              | <b>23,458</b>       | <b>23,324</b>       |

**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.

|  |                         |
|--|-------------------------|
| <b>Actuarial Present Value of Accumulated Plan Benefits as of July 1, 2011</b> | <b>\$ 2,603,104,792</b> |
| Increase/(Decrease) During Year Attributable to:                               |                         |
| a. Normal Cost <sup>(1)</sup>  | \$ 75,717,495           |
| b. Increase for Interest Due to Decrease in Discount Period                    | 195,043,657             |
| c. Benefits Paid   | (159,361,349)           |
| d. Plan Amendment  | 0                       |
| e. Funding Method Changes  | 0                       |
| f. Assumption Changes  | 0                       |
| g. (Gains)/Losses  | 9,878,670               |
| Net Increase/(Decrease)  | \$ 121,278,473          |
| <b>Actuarial Present Value of Accumulated Plan Benefits as of July 1, 2012</b> | <b>\$ 2,724,383,265</b> |

<sup>(1)</sup> Includes 3.28% of July 1, 2011, DROP account balance (\$376,705,525) 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) |
|--------------------------|-------------------------------|---|---------------------------|--------------------|---------------------|---|
| 07/01/2007               | \$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%  |
| 07/01/2011               | \$1,757,838,480               | \$ 2,760,356,036                                | \$ 1,002,517,556          | 63.7%              | \$ 243,684,122      | 411.4%  |
| 07/01/2012               | \$1,759,145,750               | \$ 2,886,447,731                                | \$ 1,127,301,981          | 60.9%              | \$ 256,250,268      | 439.9%  |

**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:

| <b>Year Ended June 30</b> | <b>Annual Required Contribution</b> | <b>Percentage Contributed</b> |
|---------------------------|-------------------------------------|-------------------------------|
| 2007                      | \$146,828,788                       | 80.0%                         |
| 2008                      | \$147,273,273                       | 56.4%                         |
| 2009                      | \$157,823,945                       | 52.7%                         |
| 2010                      | \$187,157,125                       | 43.9%                         |
| 2011                      | \$195,669,404                       | 44.9%                         |
| 2012                      | \$142,357,604                       | 66.3%                         |

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 <sup>(1)</sup>

| Asset Category                     | Market Value as of<br>June 30, 2012 | Market Value as of<br>June 30, 2011 |
|------------------------------------|-------------------------------------|-------------------------------------|
|                                    | Amount                              | Amount                              |
| 1. Cash and Short-term Investments | \$ 42,074,327                       | \$ 43,898,020                       |
| 2. Receivables                     | \$ 18,734,922                       | \$ 18,662,204                       |
| 3. Investments at fair value       |                                     |                                     |
| a. Government Bonds                | \$ 177,350,819                      | \$ 174,629,567                      |
| b. Foreign Government Bonds        | 50,669,507                          | 44,087,338                          |
| c. U.S. Treasury                   | 25,034,890                          | 25,565,795                          |
| d. International Securities        | 38,410,264                          | 49,586,555                          |
| e. Corporate Bonds                 | 27,018,172                          | 16,842,408                          |
| f. International Corporate Bonds   | 0                                   | 0                                   |
| g. Common Stock                    | 805,989,538                         | 835,236,441                         |
| h. Foreign Stock                   | 160,907,827                         | 188,895,201                         |
| i. Mortgage-backed Securities      | 2,856,540                           | 6,147,534                           |
| j. Municipal Bonds                 | 3,550,556                           | 2,928,561                           |
| k. Limited Partnerships            | 358,709,724                         | 340,978,192                         |
| l. Securities Lending              | 178,692,610                         | 192,135,212                         |
| m. Total                           | \$ 1,829,190,447                    | \$ 1,877,032,804                    |
| 4. Assets used in plan operations  | \$ 42,010                           | \$ 37,953                           |
| 5. Total Assets                    | \$ 1,890,041,706                    | \$ 1,939,630,981                    |
| 6. Liabilities                     | \$ (180,806,737)                    | \$ (195,533,303)                    |
| 7. Net Assets for Pension Benefits | \$ 1,709,234,969                    | \$ 1,744,097,678                    |

<sup>(1)</sup> Deferred option plan assets are included in the valuation assets. The value of these assets on July 1, 2011, is \$376,705,525 and the value on July 1, 2012, is \$420,412,628.

## RECONCILIATION OF ASSETS

| Transactions  | June 30, 2012    | June 30, 2011    |
|---|------------------|------------------|
| <b>Additions</b>  |                  |                  |
| 1. Contributions  |                  |                  |
| a. Contributions from Employers                                 | \$ 32,816,159    | \$ 31,910,497    |
| b. Contributions from Plan Members                              | 19,426,927       | 18,904,554       |
| c. Insurance Premium Tax  | 68,245,816       | 59,876,295       |
| d. Legislative Appropriation                                    | 0                | 0                |
| e. Total  | \$ 120,488,902   | \$ 110,691,346   |
| 2. Net Investment Income  | \$ 5,734,519     | \$ 307,628,153   |
| 3. Total Additions  | \$ 126,223,421   | \$ 418,319,499   |
| <b>Deductions</b>   |                  |                  |
| 4. Benefit Payments   | \$ (159,361,349) | \$ (152,471,822) |
| 5. Administrative Expenses                                      | (1,724,781)      | (1,645,817)      |
| 6. Adjustment   | 0                | 0                |
| 7. Total Deductions   | \$ (161,086,130) | \$ (154,117,639) |
| 8. Net Increase   | \$ (34,862,709)  | \$ 264,201,860   |
| 9. Net Assets Held in Trust for Pension Benefits <sup>(1)</sup> |                  |                  |
| a. Beginning of Year  | \$ 1,744,097,678 | \$ 1,479,895,818 |
| b. End of Year  | \$ 1,709,234,969 | \$ 1,744,097,678 |
| 10. DROP Assets (included above)                                |                  |                  |
| a. Beginning of Year  | \$ 376,705,525   | \$ 315,107,044   |
| b. End of Year  | \$ 420,412,628   | \$ 376,705,525   |

<sup>(1)</sup> 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 |
| 2007/2008                         | \$ (200,717,174)        | \$ (160,573,740)          | \$ (40,143,434)        | \$ 0                       |
| 2008/2009                         | (453,781,818)           | (272,269,092)             | (90,756,364)           | (90,756,362)               |
| 2009/2010                         | 158,405,157             | 63,362,062                | 31,681,031             | 63,362,064                 |
| 2010/2011                         | 141,090,329             | 28,218,066                | 28,218,066             | 84,654,197                 |
| 2011/2012                         | (133,963,350)           | 0                         | (26,792,670)           | (107,170,680)              |
| <b>Total</b>                      | <b>\$ (488,966,856)</b> | <b>\$ (341,262,704)</b>   | <b>\$ (97,793,371)</b> | <b>\$ (49,910,781)</b>     |

| Development of Actuarial Value of Assets  |                  |
|---|------------------|
| 1. Actuarial Value as of July 1, 2011 (Excluding DROP) (pre-corridor)                                     | \$ 1,381,132,955 |
| 2. Contributions  |                  |
| a. Employer (Excluding DROP)  | \$ 25,494,027    |
| b. Member   | 19,426,927       |
| c. Insurance Tax  | 68,245,816       |
| d. Legislative Appropriation  | 0                |
| e. Total  | \$ 113,166,770   |
| 3. Decreases During the Year  |                  |
| a. Benefit Payments (Excluding benefit payments from DROP, including transfer payments to DROP)           | \$ 157,891,564   |
| b. Noninvestment Expenses   | 1,724,781        |
| c. Total  | \$ 159,616,345   |
| 4. Expected Return at 7.50% on:   |                  |
| a. Item 1   | \$ 103,584,972   |
| b. Item 2   | 4,243,754        |
| c. Item 3   | 5,985,613        |
| d. Total (a + b - c)  | \$ 101,843,113   |
| 5. Expected Actuarial Value of Assets (Excluding DROP) June 30, 2012 (1 + 2 - 3 + 4)                      | \$ 1,436,526,493 |
| 6. Unrecognized Asset Gain/(Loss) as of June 30, 2011   | \$ (13,740,802)  |
| 7. DROP Assets  | \$ 420,412,628   |
| 8. Expected Actuarial Value June 30, 2012 plus previous year's Unrecognized Asset Gain/(Loss) (5 + 6 + 7) | \$ 1,843,198,319 |
| 9. Market Value June 30, 2012   | \$ 1,709,234,969 |
| 10. 2011/2012 Asset Gain/(Loss) (9 - 8)   | \$ (133,963,350) |
| 11. Asset Gain/(Loss) to be Recognized as of June 30, 2012  | \$ (97,793,371)  |
| 12. Initial Actuarial Value July 1, 2012 (5 + 7 + 11)   | \$ 1,759,145,750 |
| 13. Constraining Values:  |                  |
| a. 80% of Market Value (9 x 0.8)  | \$ 1,367,387,975 |
| b. 120% of Market Value (9 x 1.2)   | 2,051,081,963    |
| 14. Actuarial Value July 1, 2012 (Including DROP) (12), but no less than (13a), nor greater than (13b)    | \$ 1,759,145,750 |



## AVERAGE ANNUAL RATES OF INVESTMENT RETURN

| Year Ending June<br>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%      |
| 2011                   | 7.21%           | 7.35%      | 21.10%       | 7.52%      |
| 2012                   | 2.41%           | 7.12%      | 0.33%        | 7.19%      |

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  |
| <b>As of July 1, 2011</b>     |               |             |            |           |
| Paid                          |               |             |            |           |
| a. Continuing                 | 3,846         | 40.4        | 13.6       | \$ 61,910 |
| b. New                        | 203           | 28.4        | 0.3        | 27,476    |
| c. Total                      | 4,049         | 39.8        | 12.9       | \$ 60,184 |
| Volunteer                     |               |             |            |           |
| a. Continuing                 | 7,316         | 38.9        | 8.4        | N/A       |
| b. New                        | 1,093         | 29.8        | 0.7        | N/A       |
| c. Total                      | 8,409         | 37.7        | 7.4        | N/A       |
| <b>Total</b>                  | <b>12,458</b> | <b>38.4</b> | <b>9.2</b> | N/A       |
| <b>As of July 1, 2012</b>     |               |             |            |           |
| Paid                          |               |             |            |           |
| a. Continuing                 | 3,815         | 40.4        | 13.5       | \$ 64,961 |
| b. New                        | 235           | 27.4        | 0.5        | 35,859    |
| c. Total                      | 4,050         | 39.6        | 12.7       | \$ 63,272 |
| Volunteer                     |               |             |            |           |
| a. Continuing                 | 7,285         | 39.0        | 8.5        | N/A       |
| b. New                        | 1,008         | 29.7        | 0.8        | N/A       |
| c. Total                      | 8,293         | 37.9        | 7.6        | N/A       |
| <b>Total</b>                  | <b>12,343</b> | <b>38.5</b> | <b>9.3</b> | 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     | 0                | 0          | 0          | 0          | 0          | 0          | 0          | 0        | 0        | 0            |
| 20-24        | 157              | 3          | 0          | 0          | 0          | 0          | 0          | 0        | 0        | 160          |
| 25-29        | 341              | 155        | 1          | 0          | 0          | 0          | 0          | 0        | 0        | 497          |
| 30-34        | 208              | 302        | 120        | 7          | 0          | 0          | 0          | 0        | 0        | 637          |
| 35-39        | 107              | 225        | 275        | 131        | 8          | 0          | 0          | 0        | 0        | 746          |
| 40-44        | 44               | 118        | 150        | 283        | 106        | 1          | 0          | 0        | 0        | 702          |
| 45-49        | 14               | 38         | 77         | 164        | 212        | 111        | 4          | 0        | 0        | 620          |
| 50-54        | 2                | 7          | 28         | 90         | 151        | 141        | 63         | 0        | 0        | 482          |
| 55-59        | 1                | 1          | 5          | 19         | 43         | 50         | 54         | 7        | 0        | 180          |
| 60-64        | 0                | 0          | 0          | 1          | 8          | 7          | 3          | 2        | 3        | 24           |
| 65-69        | 0                | 0          | 0          | 2          | 0          | 0          | 0          | 0        | 0        | 2            |
| 70-74        | 0                | 0          | 0          | 0          | 0          | 0          | 0          | 0        | 0        | 0            |
| 75+          | 0                | 0          | 0          | 0          | 0          | 0          | 0          | 0        | 0        | 0            |
| <b>Total</b> | <b>874</b>       | <b>849</b> | <b>656</b> | <b>697</b> | <b>528</b> | <b>310</b> | <b>124</b> | <b>9</b> | <b>3</b> | <b>4,050</b> |

## 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     | 0                | 0             | 0             | 0             | 0             | 0             | 0             | 0              | 0             | 0             |
| 20-24        | 37,818           | 42,292        | 0             | 0             | 0             | 0             | 0             | 0              | 0             | 37,902        |
| 25-29        | 44,309           | 51,173        | 56,489        | 0             | 0             | 0             | 0             | 0              | 0             | 46,474        |
| 30-34        | 45,685           | 54,980        | 61,253        | 66,715        | 0             | 0             | 0             | 0              | 0             | 53,256        |
| 35-39        | 43,790           | 55,963        | 67,493        | 72,598        | 74,680        | 0             | 0             | 0              | 0             | 61,589        |
| 40-44        | 47,502           | 54,210        | 67,200        | 73,998        | 83,021        | 67,132        | 0             | 0              | 0             | 68,911        |
| 45-49        | 42,598           | 54,410        | 68,980        | 73,092        | 78,068        | 84,948        | 82,837        | 0              | 0             | 74,635        |
| 50-54        | 55,102           | 82,576        | 63,980        | 68,178        | 78,725        | 82,727        | 86,787        | 0              | 0             | 78,081        |
| 55-59        | 71,115           | 32,526        | 54,005        | 58,882        | 68,599        | 73,535        | 76,850        | 111,025        | 0             | 72,478        |
| 60-64        | 0                | 0             | 0             | 30,477        | 66,682        | 75,644        | 103,111       | 78,229         | 73,232        | 74,122        |
| 65-69        | 0                | 0             | 0             | 54,811        | 0             | 0             | 0             | 0              | 0             | 54,811        |
| 70-74        | 0                | 0             | 0             | 0             | 0             | 0             | 0             | 0              | 0             | 0             |
| 75+          | 0                | 0             | 0             | 0             | 0             | 0             | 0             | 0              | 0             | 0             |
| <b>Total</b> | <b>43,596</b>    | <b>54,569</b> | <b>66,190</b> | <b>72,167</b> | <b>78,255</b> | <b>81,829</b> | <b>82,727</b> | <b>103,737</b> | <b>73,232</b> | <b>63,272</b> |

## 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+      |              |
| <b>Under 20</b> | 0                | 0            | 0            | 0          | 0          | 0         | 0         | 0        | 0        | <b>0</b>     |
| <b>20-24</b>    | 829              | 65           | 0            | 0          | 0          | 0         | 0         | 0        | 0        | <b>894</b>   |
| <b>25-29</b>    | 759              | 376          | 32           | 0          | 0          | 0         | 0         | 0        | 0        | <b>1,167</b> |
| <b>30-34</b>    | 702              | 464          | 196          | 11         | 0          | 0         | 0         | 0        | 0        | <b>1,373</b> |
| <b>35-39</b>    | 491              | 416          | 207          | 133        | 6          | 0         | 0         | 0        | 0        | <b>1,253</b> |
| <b>40-44</b>    | 437              | 373          | 225          | 203        | 56         | 2         | 0         | 0        | 0        | <b>1,296</b> |
| <b>45-49</b>    | 244              | 284          | 224          | 193        | 90         | 17        | 1         | 0        | 0        | <b>1,053</b> |
| <b>50-54</b>    | 44               | 140          | 196          | 212        | 85         | 31        | 7         | 1        | 0        | <b>716</b>   |
| <b>55-59</b>    | 12               | 15           | 92           | 138        | 84         | 23        | 10        | 1        | 0        | <b>375</b>   |
| <b>60-64</b>    | 3                | 4            | 4            | 49         | 39         | 10        | 6         | 3        | 1        | <b>119</b>   |
| <b>65-69</b>    | 2                | 1            | 1            | 9          | 11         | 1         | 2         | 1        | 1        | <b>29</b>    |
| <b>70-74</b>    | 0                | 0            | 1            | 2          | 2          | 1         | 2         | 0        | 0        | <b>8</b>     |
| <b>75+</b>      | 0                | 0            | 0            | 5          | 4          | 0         | 1         | 0        | 0        | <b>10</b>    |
| <b>Total</b>    | <b>3,523</b>     | <b>2,138</b> | <b>1,178</b> | <b>955</b> | <b>377</b> | <b>85</b> | <b>29</b> | <b>6</b> | <b>2</b> | <b>8,293</b> |

## PLAN MEMBERS (CONTINUED)

## E. Inactive Member Statistics

| <b>Paid</b>                                |               |                                 |
|--|---------------|---------------------------------|
| <b>Inactive Members as of July 1, 2012</b> | <b>Number</b> | <b>Amount of Annual Benefit</b> |
| <b>Members Receiving Benefits</b>          |               |                                 |
| a. Retired                                 | 2,002         | \$ 57,191,448                   |
| b. Beneficiaries                           | 789           | 21,880,620                      |
| c. Disabled                                | 1,449         | 43,071,444                      |
| d. Deferred Option                         | 83            | 3,458,736                       |
| <b>Total</b>                               | <b>4,323</b>  | <b>\$ 125,602,248</b>           |
| <b>Members with Deferred Benefits</b>      |               |                                 |
| a. Terminated Vested                       | 61            | \$ 890,796                      |
| <b>Total</b>                               | <b>61</b>     | <b>\$ 890,796</b>               |

| <b>Volunteer</b>                           |               |                                 |
|--|---------------|---------------------------------|
| <b>Inactive Members as of July 1, 2012</b> | <b>Number</b> | <b>Amount of Annual Benefit</b> |
| <b>Members Receiving Benefits</b>          |               |                                 |
| a. Retired                                 | 3,958         | \$ 6,998,712                    |
| b. Beneficiaries                           | 1,158         | 1,986,408                       |
| c. Disabled                                | 342           | 484,392                         |
| d. Deferred Option                         | 24            | 45,564                          |
| <b>Total</b>                               | <b>5,482</b>  | <b>\$ 9,515,076</b>             |
| <b>Members with Deferred Benefits</b>      |               |                                 |
| a. Terminated Vested                       | 1,249         | \$ 2,071,884                    |
| <b>Total</b>                               | <b>1,249</b>  | <b>\$ 2,071,884</b>             |

**PLAN MEMBERS (CONTINUED)****F. Members in Pay Status - Annual Benefits**

| Paid         |                 |                     |               |                   |                  |                   |                       |                    |
|--------------|-----------------|---------------------|---------------|-------------------|------------------|-------------------|-----------------------|--------------------|
| Attained Age | Retired Members |                     | Beneficiaries |                   | Disabled Members |                   | Current Payment Total |                    |
|              | No.             | Benefit             | No.           | Benefit           | No.              | Benefit           | No.                   | Benefit            |
| Under 50     | 63              | \$1,765,476         | 40            | \$1,015,260       | 123              | \$2,822,352       | 226                   | \$5,603,088        |
| 50-54        | 238             | 6,831,288           | 28            | 711,996           | 150              | 4,336,092         | 416                   | 11,879,386         |
| 55-59        | 344             | 10,174,776          | 59            | 1,598,964         | 272              | 8,416,812         | 675                   | 20,190,552         |
| 60-64        | 360             | 10,343,304          | 70            | 1,821,204         | 298              | 9,124,392         | 728                   | 21,288,900         |
| 65-69        | 316             | 8,569,164           | 97            | 2,497,980         | 261              | 7,569,192         | 674                   | 18,636,336         |
| 70-74        | 287             | 7,550,208           | 127           | 3,284,844         | 197              | 5,829,960         | 611                   | 16,665,012         |
| 75-79        | 185             | 5,420,544           | 126           | 3,585,024         | 83               | 2,525,796         | 394                   | 11,531,364         |
| 80-84        | 124             | 3,859,308           | 116           | 3,505,800         | 43               | 1,614,348         | 283                   | 8,979,456          |
| 85-89        | 64              | 2,092,320           | 71            | 2,215,728         | 16               | 582,216           | 151                   | 4,890,264          |
| 90 and over  | 21              | 585,060             | 55            | 1,643,820         | 6                | 250,284           | 82                    | 2,479,164          |
| <b>Total</b> | <b>2,002</b>    | <b>\$57,191,448</b> | <b>789</b>    | <b>21,880,620</b> | <b>1,449</b>     | <b>43,071,444</b> | <b>4,240</b>          | <b>122,143,512</b> |

| Volunteer    |                 |                     |               |                     |                  |                   |                       |                     |
|--------------|-----------------|---------------------|---------------|---------------------|------------------|-------------------|-----------------------|---------------------|
| Attained Age | Retired Members |                     | Beneficiaries |                     | Disabled Members |                   | Current Payment Total |                     |
|              | No.             | Benefit             | No.           | Benefit             | No.              | Benefit           | No.                   | Benefit             |
| Under 50     | 227             | \$ 415,968          | 69            | \$ 85,308           | 35               | \$ 42,744         | 331                   | \$ 544,020          |
| 50-54        | 503             | 844,296             | 36            | 52,116              | 45               | 61,944            | 584                   | 958,356             |
| 55-59        | 675             | 1,151,496           | 69            | 103,968             | 45               | 62,256            | 789                   | 1,317,720           |
| 60-64        | 641             | 1,112,472           | 96            | 162,084             | 55               | 73,644            | 792                   | 1,348,200           |
| 65-69        | 665             | 2,296,124           | 124           | 209,472             | 73               | 105,912           | 862                   | 1,511,508           |
| 70-74        | 486             | 872,304             | 143           | 254,748             | 42               | 62,208            | 671                   | 1,189,260           |
| 75-79        | 342             | 623,280             | 175           | 316,392             | 35               | 55,344            | 552                   | 995,016             |
| 80-84        | 239             | 449,112             | 170           | 306,780             | 7                | 11,244            | 416                   | 767,136             |
| 85-89        | 131             | 242,196             | 157           | 282,024             | 3                | 5,496             | 291                   | 529,716             |
| 90 and over  | 49              | 92,464              | 119           | 213,516             | 2                | 3,600             | 170                   | 308,580             |
| <b>Total</b> | <b>3,958</b>    | <b>\$ 6,998,712</b> | <b>1,158</b>  | <b>\$ 1,986,408</b> | <b>342</b>       | <b>\$ 484,392</b> | <b>5,458</b>          | <b>\$ 9,469,512</b> |

## PLAN MEMBERS (CONTINUED)

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

| <b>Paid</b>         |                                  |                   |                                     |                     |
|---------------------|----------------------------------|-------------------|-------------------------------------|---------------------|
| <b>Attained Age</b> | <b>Terminated Vested Members</b> |                   | <b>Deferred Option Plan Members</b> |                     |
|                     | <b>No.</b>                       | <b>Benefit</b>    | <b>No.</b>                          | <b>Benefit</b>      |
| Under 40            | 10                               | \$ 147,852        | 0                                   | \$ 0                |
| 40-44               | 18                               | 204,480           | 4                                   | 192,228             |
| 45-49               | 12                               | 135,996           | 20                                  | 898,800             |
| 50-54               | 14                               | 190,548           | 37                                  | 1,517,580           |
| 55-59               | 5                                | 173,988           | 13                                  | 483,912             |
| 60-64               | 2                                | 37,932            | 9                                   | 366,216             |
| 65-69               | 0                                | 0                 | 0                                   | 0                   |
| 70 and over         | 0                                | 0                 | 0                                   | 0                   |
| <b>Total</b>        | <b>61</b>                        | <b>\$ 890,796</b> | <b>83</b>                           | <b>\$ 3,458,736</b> |

| <b>Volunteer</b>    |                                  |                     |                                     |                  |
|---------------------|----------------------------------|---------------------|-------------------------------------|------------------|
| <b>Attained Age</b> | <b>Terminated Vested Members</b> |                     | <b>Deferred Option Plan Members</b> |                  |
|                     | <b>No.</b>                       | <b>Benefit</b>      | <b>No.</b>                          | <b>Benefit</b>   |
| Under 40            | 103                              | \$ 119,628          | 0                                   | \$ 0             |
| 40-44               | 170                              | 213,492             | 0                                   | 0                |
| 45-49               | 231                              | 325,380             | 4                                   | 7,656            |
| 50-54               | 214                              | 328,572             | 10                                  | 18,096           |
| 55-59               | 216                              | 373,716             | 5                                   | 9,456            |
| 60-64               | 114                              | 238,224             | 4                                   | 7,656            |
| 65-69               | 61                               | 136,668             | 1                                   | 2,700            |
| 70 and over         | 140                              | 336,204             | 0                                   | 0                |
| <b>Total</b>        | <b>1,249</b>                     | <b>\$ 2,071,884</b> | <b>24</b>                           | <b>\$ 45,564</b> |



## 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, 2011               | 4,049          | 88                   | 56                      | 1,924           | 1,425            | 766            | 8,308 |
| Deferred Option Plan Retirees    | (23)           | 23                   | -                       | -               | -                | -              | -     |
| Service Retirements              | (97)           | (25)                 | (2)                     | 124             | -                | -              | -     |
| Disability Retirements           | (47)           | (3)                  | -                       | -               | 50               | -              | -     |
| Deaths Without Beneficiaries     | -              | -                    | -                       | (5)             | (8)              | (43)           | (56)  |
| Deaths With Beneficiaries        | (2)            | -                    | -                       | (33)            | (24)             | 59             | -     |
| Nonvested Terminations           | (42)           | -                    | -                       | -               | -                | -              | (42)  |
| Vested Terminations              | (9)            | -                    | 9                       | -               | -                | -              | -     |
| Rehires                          | 2              | -                    | (1)                     | -               | (1)              | -              | -     |
| Cashouts of Member Contributions | -              | -                    | -                       | -               | -                | -              | -     |
| Expiration of Benefits           | -              | -                    | -                       | -               | -                | -              | -     |
| Data Corrections                 | (7)            | -                    | -                       | (8)             | 7                | 7              | (1)   |
| Transfers to Volunteer           | (7)            | -                    | (1)                     | -               | -                | -              | (8)   |
| Transfers from Volunteer         | 62             | -                    | -                       | -               | -                | -              | 62    |
| Net Change                       | (170)          | (5)                  | 5                       | 78              | 24               | 23             | (45)  |
| New Entrants During the Year     | 171            | -                    | -                       | -               | -                | -              | 171   |
| Net Change                       | 1              | (5)                  | 5                       | 78              | 24               | 23             | 126   |
| As of July 1, 2012               | 4,050          | 83                   | 61                      | 2,002           | 1,449            | 789            | 8,434 |

## 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 | Beneficiaries |        |
| As of July 1, 2011               | 8,409             | 31                   | 1,227                   | 3,851           | 332              | 1,166         | 15,016 |
| Deferred Option Plan Retirees    | (2)               | 2                    | -                       | -               | -                | -             | -      |
| Service Retirements              | (126)             | (9)                  | (52)                    | 187             | -                | -             | -      |
| Disability Retirements           | (16)              | -                    | -                       | -               | 16               | -             | -      |
| Deaths Without Beneficiaries     | -                 | -                    | (2)                     | (26)            | (4)              | (79)          | (111)  |
| Deaths With Beneficiaries        | (13)              | -                    | -                       | (51)            | (4)              | 68            | -      |
| Nonvested Terminations           | (815)             | -                    | -                       | -               | -                | -             | (815)  |
| Vested Terminations              | (90)              | -                    | 90                      | -               | -                | -             | -      |
| Rehires                          | 13                | -                    | (12)                    | (1)             | -                | -             | -      |
| Cashouts of Member Contributions | -                 | -                    | -                       | -               | -                | -             | -      |
| Expiration of Benefits           | -                 | -                    | -                       | -               | -                | -             | -      |
| Data Corrections                 | -                 | -                    | (2)                     | (2)             | 2                | 3             | 1      |
| Transfers to Paid                | (62)              | -                    | -                       | -               | -                | -             | (62)   |
| Transfers from Paid              | 8                 | -                    | -                       | -               | -                | -             | 8      |
| Net Change                       | (1,103)           | (7)                  | 22                      | 107             | 10               | (8)           | (979)  |
| New Entrants During the Year     | 987               | -                    | -                       | -               | -                | -             | 987    |
| Net Change                       | (116)             | (7)                  | 22                      | 107             | 10               | (8)           | 8      |
| As of July 1, 2012               | 8,293             | 24                   | 1,249                   | 3,958           | 342              | 1,158         | 15,024 |

## 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, 2012, 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 if necessary).

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.

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:

| <b>Years of Service</b> | <b>Inflation %</b> | <b>Merit %</b> | <b>Increase %</b> |
|-------------------------|--------------------|----------------|-------------------|
| 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:

| <b>Attained Service</b> | <b>Annual Rates of Retirement Per 100 Eligible Members</b> |
|-------------------------|--|
| 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.

The mortality assumption includes an appropriate amount of conservatism that reflects expected future mortality improvement. The use of the current mortality assumption results in a liability greater than the RP-2000 Table with Blue Collar adjustment, projected ten years past the valuation date with Scale AA.

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

(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.

**3. Disability Rates -**

Graduated rates. See table below:

| <b>Age Range</b> | <b>Rate</b> |
|------------------|-------------|
| 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:

| <b>Attained Service</b> | <b>Rate</b> |
|-------------------------|-------------|
| 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 no annual increase in benefits during 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:

| <b>Attained Service</b> | <b>Annual Rates of Retirement Per 100 Eligible Members</b> |
|-------------------------|--|
| 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.

The mortality assumption includes an appropriate amount of conservatism that reflects expected future mortality improvement. The use of the current mortality assumption results in a liability greater than the RP-2000 Table with Blue Collar adjustment, projected ten years past the valuation date with Scale AA.

(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:

| <b>Age Range</b> | <b>Rate</b> |
|------------------|-------------|
| 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:

| <b>Attained Service</b> | <b>Rate</b> |
|-------------------------|-------------|
| 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 no annual increase in benefits during 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)**

|                                     |   |
|-------------------------------------|---|
| <b>Late Retirement Benefit:</b>     | 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.   |
| <b>Early Retirement Benefit:</b>    | None.   |
| <b>Disability or Death Benefit:</b> | 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.

