# Oklahoma Municipal Retirement Fund 

## ACTUARIAL VALUATION OF FUNDING REQUIREMENTS

Effective for the Year Starting
July 1, 2009

July 31, 2009

Prepared by

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## Certification

This report presents the actuarial position of the member plans of the Oklahoma Municipal Retirement Fund as of January 1, 2009, in accordance with generally accepted actuarial principles applied on a basis consistent with the preceding valuation. The purposes of the valuation are:

- to determine the required contribution for the retirement program effective July 1 , 2009.
- to provide accounting information required by GASB 50 (funding progress).

The valuation results in this report are based on participant data provided by the member employers and financial data provided by the Oklahoma Municipal Retirement Fund.

In our opinion, each assumption used in combination to calculate liabilities and costs represents our best estimate of anticipated experience under the plan and is reasonably related to the plan experience and to reasonable expectations.

## Dean Actuaries, lld



June 18, 2009
Date

Charles E. Dean, FSA, FCA
Enrolled Actuary 08-1249


Sean M. Sullivan, FSA
Enrolled Actuary 08-3649

## A

## Comparison of Required Contribution Rates

## A Comparison of Required Contribution Rates

The exhibit in this section shows the required contribution rates determined by the 2009 actuarial valuation. These rates will be in effect from July 1, 2009 through June 30, 2010. The following information is presented for each city:

- Whether the plan has an unfunded actuarial liability or a surplus (UAL or Surplus). In general, the unfunded actuarial accrued liability or surplus is amortized as a level dollar amount over 30 years. For plans that have had a surplus every year since 2006, the surplus is amortized as a level percent of pay over the future working lifetime of active plan participants. The amortization amount is redetermined each year.
- The total rate. This is the aggregate contribution rate determined under the 2009 valuation for each plan. The rate determined under the 2008 valuation is also shown for comparison.
- The employee rate. This rate, determined by plan provisions, is the percent of pay to be contributed to the plan by employees for the 2009-09 plan year. The employer rate is generally determined by subtracting the employee rate from the total rate. In some cases the employee rate actually exceeds the total rate because of favorable plan experience in the past (that is, investment performance better than the assumed $7 \frac{1}{2} \%$, or demographic changes more favorable than assumed). In these cases, the required employer contribution rate effective $7 / 1 / 08$ is $0.00 \%$.
- A brief summary of the plan provisions elected in the adoption agreement. See Section $E$ for a more detailed description of the plan provisions of the OMRF Master Plan. Those municipalities which have upgraded the plan level or changed another plan provision since the prior valuation are indicated in the final column.

Change in Contribution Rate as Percent of Covered Payroll


Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

| City | UAL or Surplus | Total rate |  | Employee Rate | Plan Provisions | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7/1/2008 | 7/1/2009 |  |  |  |
| Adair | UAL. | 12.01\% | 11.89\% | 4.50\% | Plan $B B$, normal retirement age 65,10 year vesting, 5 years certain, no COLA | Upgrade |
| Altus | UAL | 13.23\% | 15.76\% | 4.00\% | Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA |  |
| Alva | Surplus | 0.00\% | 2.39\% | 0.00\% | Plan B, normal retirement age 65, 10 year vesting, 5 years certain, COLA |  |
| Antlers | UAL. | 8.22\% | 8.70\% | 3.00\% | Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Ardmore | UAL | 24.11\% | 25.17\% | 4.00\% | Plan AAA, normal retirement age 65,5 year vesting, 5 years certain, COLA |  |
| Bartlesville | UAL | 13.86\% | 17.85\% | 3.00\% | Plan BAR, normal retirement age 65, 7 year vesting, 0 years certain, no COLA |  |
| Bethany | UAL | 23.12\% | 26.23\% | 4.60\% | Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, COLA, Hybrid |  |
| Bethany/Warr Acres | UAL | 16.82\% | 23.49\% | 6.00\% | Plan AAA, Rule of 80, 7 year vesting, 10 years certain, no COLA |  |
| Billings | UAL | 9.41\% | 9.61\% | 3.75\% | Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |
| Binger | UAL | 4.55\% | 7.55\% | 2.25\% | Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA | Upgrade, probation |
| Blackwell | UAL | 14.78\% | 18.32\% | 4.50\% | Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA |  |
| Blair | UAL | 10.68\% | 11.88\% | 3.41\% | Plan AA, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Boise City | UAL | 6.53\% | 14.03\% | 0.00\% | Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA |  |
| Braman | UAL | 16.20\% | 21.44\% | 6.00\% | Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Bristow | UAL | 17.54\% | 20.14\% | 5.25\% | Plan AA, normal retirement age 65,5 year vesting, 5 years certain, COLA |  |
| Broken Bow | UAL | 13.63\% | 15.25\% | 5.25\% | Plan AA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Buffalo | Surplus | 5.24\% | 9.07\% | 3.50\% | Plan AA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA |  |
| Burns Flat | UAL | 8.42\% | 12.59\% | 3.75\% | Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA | Upgrade |
| Calera | UAL | 7.45\% | 7.26\% | 2.25\% | Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |

Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

| City | UAL or Surplus | Total rate |  | Employee Rate | Plan Provisions | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7/1/2008 | 7/1/2009 |  |  |  |
| Central Okla MCD | UAL | 35.10\% | 42.20\% | 6.00\% | Plan AAA, Ruie of 80,10 year vesting, 5 years certain, COLA |  |
| Chandler | UAL | 8.98\% | 9.03\% | 3.75\% | Plan CC, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Checotah | UAL | 9.13\% | 9.24\% | 3.00\% | Plan $A$, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Cherokee \& CDA | UAL | 6.21\% | 8.85\% | 1.50\% | Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Chickasha | Surplus | 2.50\% | 12.73\% | 2.50\% | Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, COLA |  |
| Claremore | UAL | 11.84\% | 13.13\% | 3.75\% | Plan AAA, normal retirement age 65,7 year vesting, 5 years certain, no COLA |  |
| Cleo Springs | UAL | 23.04\% | 25.46\% | 3.73\% | Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA |  |
| Cleveland | UAL | 18.17\% | 19.65\% | 3.00\% | Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Clinton | UAL | 10.57\% | 17.12\% | 5.25\% | Plan AAA, normal retirement age 62/30, 7 year vesting, 10 years certain, COLA |  |
| Collinsville | UAL | 10.52\% | 12.85\% | 4.00\% | Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |
| Cordell | UAL | 12.41\% | 16.51\% | 0.00\% | Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, COLA |  |
| Cushing | UAL | 16.35\% | 19.35\% | 0.00\% | Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA |  |
| Davis | UAL | 8.94\% | 16.11\% | 4.50\% | Plan BB , normal retirement age 65,7 year vesting, 5 years certain, no COLA | Upgrade |
| Del City | UAL | 20.85\% | 28.22\% | 0.00\% | Plan AAA, special retirement provisions, 7 year vesting, 10 years certain, COLA, Hybrid |  |
| Dewey | UAL | 8.60\% | 12.03\% | 4.00\% | Plan AAA, normal retirement age 65,10 year vesting, 5 years certain, no COLA |  |
| Durant | UAL | 10.21\% | 13.70\% | 0.00\% | Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, COLA |  |
| El Reno | UAL | 12.80\% | 13.87\% | 4.50\% | Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Eufaula | UAL | 8.65\% | 8.34\% | 3.75\% | Plan CC, normal retirement age 65,10 year vesting, 5 years certain, no COLA |  |
| Fort Cobb | UAL | 10.05\% | 9.31\% | 3.00\% | Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |


| City | UAL or Surplus | Oklahoma Municipal Retirement Fund COMPARISON OF REQUIRED CONTRIBUTION RATES |  |  |  | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total rate |  | Employee |  |  |
|  |  | 7/1/2008 | 7/1/2009 | Rate | Plan Provisions |  |
| Foss Reservoir PWA | UAL | 18.71\% | 18.38\% | 3.75\% | Plan BB, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA |  |
| Frederick | UAL | 14.97\% | 16.97\% | 4.24\% | Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Garber | UAL | 4.81\% | 5.04\% | 2.25\% | Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Geary | UAL | 9.57\% | 10.94\% | 3.28\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Goodwell | UAL | 6.04\% | 5.74\% | 2.25\% | Plan B, normal retirement age 65, 5 year vesting, 5 years certain, no COLA |  |
| Gore and Gore PWA | UAL | 6.84\% | 7.62\% | 3.00\% | Plan $A$, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Granite | UAL | 8.05\% | 15.83\% | 4.00\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA |  |
| Guthrie | UAL | 8.14\% | 10.48\% | 3.69\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Guymon | UAL | 6.07\% | 8.34\% | 0.00\% | Plan CC , normal retirement age 65,7 year vesting, 5 years certain, no COLA |  |
| Harrah | UAL | 17.16\% | 18.16\% | 5.25\% | Plan AA, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Healdton | UAL | 12.28\% | 11.38\% | 3.75\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Henryetta | UAL. | 3.38\% | 7.66\% | 0.65\% | Plan CC, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Hooker | UAL | 15.46\% | 18.45\% | 3.75\% | Plan BB , normal retirement age 65, 5 year vesting, 10 years certain, no COLA | Cert period |
| Huibert | UAL | 7.74\% | 7.18\% | 2.25\% | Plan $B$, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Hydro | UAL | 11.02\% | 11.66\% | 3.00\% | Plan A, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA |  |
| Kansas | UAL | 7.15\% | 6.93\% | 1.50\% | Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Kingston | UAL | 11.62\% | 12.69\% | 3.75\% | Plan CC, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA |  |
| Krebs \& Krebs Utility Auth. | UAL | 11.19\% | 10.74\% | 3.00\% | Plan $A$, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Laverne | UAL | 12.38\% | 14.90\% | $3.75 \%$ | Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |

Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

| City | UAL or Surplus | Total rate |  | $\begin{gathered} \text { Employee } \\ \text { Rate } \\ \hline \end{gathered}$ | Plan Provisions | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7/1/2008 | 7/1/2009 |  |  |  |
| Lindsay | UAL | 12.88\% | 15.64\% | 3.75\% | Plan BB , normal retirement age 65, 10 year vesting, 5 years certain, COLA |  |
| Madill | UAL | 11.23\% | 12.77\% | 4.50\% | Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |
| Mannford | UAL | 23.33\% | 23.72\% | 6.00\% | Plan AAA, Rule of 80,5 year vesting, 5 years certain, no COLA |  |
| Marietta | Surplus | 5.25\% | 10.29\% | 5.25\% | Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |
| Marietta PWA | UAL | 19.91\% | 20.05\% | 5.00\% | Plan AA, normal retirement age 65,10 year vesting, 5 years certain, no COLA |  |
| McLoud | UAL | 7.01\% | 8.13\% | 2.25\% | Plan B, normal retirement age 65, 7 year vesting, 5 years certain, COLA |  |
| Medford | UAL | 27.89\% | 30.01\% | 4.00\% | Plan AA, normal retirement age 62/30, 10 year vesting, 10 years certain, COLA, Hybrid |  |
| Meeker | UAL | 8.47\% | 10.43\% | 3.00\% | Plan BB, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Mooreland | UAL | 14.09\% | 18.91\% | 3.00\% | Plan AA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Mountain Park MCD | UAL | 17.18\% | 24.49\% | 6.00\% | Plan AAA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Muldrow | UAL | 11.45\% | 14.59\% | 4.50\% | Plan BB, Rule of 80,7 year vesting, 5 years certain, no COLA | Ret age |
| Mustang | UAL | 17.40\% | 19.23\% | 5.25\% | Plan AA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Newkirk | UAL | 20.74\% | 23.42\% | 5.25\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Nichols Hills | UAL | 28.41\% | 31.91\% | 9.00\% | Plan AA, Rule of 80,7 year vesting, 10 years certain, COLA, Hybrid |  |
| Noble | UAL | 11.65\% | 12.97\% | 3.35\% | Plan BB, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Nowata | UAL | 7.22\% | 13.64\% | 5.00\% | Plan AAA, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Oilton | UAL. | 9.35\% | 10.97\% | 3.75\% | Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Okeene | UAL | 7.43\% | 11.87\% | 3.60\% | Plan AAA, normal retirement age 65,7 year vesting, 5 years certain, no COLA |  |
| Okemah | UAL | 5.46\% | 5.62\% | 2.25\% | Plan B, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |

Oklahoma Municipal Retirement Fund COMPARISON OF REQUIRED CONTRIBUTION RATES

| City | UAL or Surplus | Total rate |  | $\begin{gathered} \text { Employee } \\ \text { Rate } \\ \hline \end{gathered}$ | Plan Provisions | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7/1/2008 | 7/1/2009 |  |  |  |
| Oklahoma Municipal League | Surplus | 2.29\% | 15.23\% | 0.00\% | Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, COLA |  |
| Okmulgee | Surplus | 5.10\% | 10.39\% | 0.00\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA |  |
| OMRF Staff | UAL | 12.04\% | 12.91\% | 4.50\% | Plan BB , normal retirement age 65,5 year vesting, 10 years certain, no COLA |  |
| Owasso | UAL | 11.55\% | 12.60\% | 4.26\% | Plan $A A$, normal retirement age 62/30, 5 year vesting, 5 years certain, no COLA |  |
| Pawnee | UAL | 7.97\% | 14.78\% | 6.00\% | Plan AAA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA | Upgrade |
| Perkins | UAL | 16.27\% | 16.62\% | 4.50\% | Plan BB, normal retirement age 65,7 year vesting, 5 years certain, COLA |  |
| Perry | UAL | 8.54\% | 10.94\% | 4.00\% | Plan AA, normal retirement age 65, 10 year vesting, 10 years certain, no COLA |  |
| Pond Creek | UAL | 16.97\% | 15.97\% | 3.00\% | Plan A, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA |  |
| Porum | UAL | \#N/A | 8.49\% | 2.25\% | Plan B, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |
| Poteau | UAL | 11.71\% | 13.33\% | 4.25\% | Plan BB , normal retirement age 65,10 year vesting, 5 years certain, no COLA |  |
| Ratliff City | UAL | 5.91\% | 5.66\% | 1.50\% | Plan C, normal retirement age 65,10 year vesting, 5 years certain, no COLA |  |
| Ringling | UAL | 4.48\% | 9.40\% | $2.25 \%$ | Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Roland | UAL | 11.01\% | 9.52\% | 3.00\% | Plan $A$, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Sallisaw | UAL | 19.22\% | 23.60\% | 6.00\% | Plan AAA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Seiling | UAL | 12.31\% | 14.04\% | 4.90\% | Plan AA, normal retirement age 65,5 year vesting, 5 years certain, no COLA |  |
| Shawnee | UAL | 19.68\% | 23.32\% | 0.00\% | Plan AA, Rule of 80,7 year vesting, 10 years certain, COLA, Hybrid |  |
| Spencer | UAL | 13.98\% | 17.74\% | 5.25\% | Plan AA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA, Hybrid |  |
| Spiro | UAL | 8.73\% | 10.29\% | 3.00\% | Plan $A$, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Stilwell | UAL | 13.06\% | 17.16\% | 4.50\% | Plan BB, normal retirement age 65,5 year vesting, 5 years certain, no COLA | Upgrade |

Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

| City | UAL or Surplus | Total rate |  | Employee Rate | Plan Provisions | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7/1/2008 | 7/1/2009 |  |  |  |
| Stratford | Surplus | 1.39\% | 1.39\% | 1.39\% | Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Stroud | UAL | 8.01\% | 9.53\% | 3.75\% | Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Sulphur | UAL | 15.28\% | 18.52\% | 5.00\% | Plan AAA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Talihina \& TPWA | UAL | 9.21\% | 7.63\% | 2.25\% | Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Thomas | UAL | 18.53\% | 18.14\% | 5.25\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Tipton | UAL | 3.98\% | 3.82\% | 1.50\% | Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Tishomingo | UAL | 13.02\% | 12.41\% | 3.00\% | Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA |  |
| Tonkawa | UAL | 11.33\% | 13.53\% | 3.50\% | Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Velma | UAL | 10.17\% | 9.87\% | 3.00\% | Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA |  |
| Vian | UAL | 4.19\% | 3.38\% | 1.50\% | Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Vinita | UAL | 19.56\% | 22.43\% | 5.25\% | Plan AA, Rule of 80,10 year vesting, 5 years certain, COLA |  |
| Wakita | UAL | 10.41\% | 9.79\% | 2.25\% | Plan B, normal retirement age 65, 7 year vesting, 5 years certain, COLA |  |
| Warr Acres | UAL | 13.63\% | 18.97\% | 2.13\% | Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA |  |
| Watonga | UAL | 16.80\% | 22.23\% | 4.00\% | Plan AAA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA |  |
| Waukomis | Surplus | 6.01\% | 7.00\% | 5.25\% | Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Waurika | Surplus | 8.18\% | 12.59\% | 2.50\% | Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA |  |
| Weatherford | UAL | \#N/A | 18.13\% | 5.25\% | Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA | Vesting |
| Webbers Falls | UAL | 5.23\% | 4.14\% | 1.50\% | Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA |  |
| Wellston | UAL | 8.90\% | 9.90\% | 3.75\% | Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA |  |

## Oklahoma Municipal Retirement Fund

 COMPARISON OF REQUIRED CONTRIBUTION RATES| City | UAL or Surplus | Total rate |  | $\begin{gathered} \text { Employee } \\ \text { Rate } \\ \hline \end{gathered}$ | Plan Provisions | Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7/1/2008 | 7/1/2009 |  |  |  |
| Westrille Utility Authority | Surplus | 8.31\% | 9.01\% | 5.25\% | Plan AA, normal retirement age 65,10 year vesting, 5 years certain, no COLA | Upgrade |
| Wetumka | UAL | 27.67\% | 28.20\% | 5.25\% | Plan AA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Yale | UAL | 7.91\% | 13.22\% | 6.00\% | Plan AAA, Rule of 80,10 year vesting, 5 years certain, no COLA |  |
| Yukon | UAL | 18.71\% | 21.14\% | 0.00\% | Plan AAA, normal retirement age 62/30, 5 year vesting, 5 years certain, no COLA |  |
| Weighted Avg Contribu | n Rates | 13.73\% | 16.71\% | 3.12\% |  |  |

## B

## Comparison of Plan

 Assets and Obligations
## B Comparison of Plan Assets and Obligations

The exhibit in this section shows the plan assets and obligations as of January 1, 2009, disclosure information required under GASB 50, and the number of active and nonactive participants. The following is presented for each plan with active participants:

- The cost method used for the plan. The entry age normal (EAN) cost method is used for all plans except Bartlesville, which uses the unit credit (UC) cost method. See Section $E$ for a further description of the actuarial cost methods.
- The valuation assets. The valuation assets are generally the actuarial value of assets. For hybrid plans, however, the employee account balances are subtracted from the actuarial value of assets to determine the valuation assets. See Section D for the development of the actuarial value of assets.
- The valuation payroll. This is the total compensation paid in calendar year 2008 to employees who were active participants on January 1, 2009. Pay for employees hired in 2008 is annualized in determining valuation payroll.
- The present value of benefits $(P V B)$. This is the total of all future benefits expected to be paid to plan participants as of January 1, 2009, discounted to the valuation date at the assumed rate of return ( $7.5 \%$ for all plans). The PVB is shown separately for active and nonactive participants.
- The actuarial accrued liability. This amount, required to be disclosed in the employer's financial statements under GASB 50, is the liability for benefits attributable to past service under the cost method used for determining the required contribution rate.
- The unfunded actuarial accrued liability. This amount, required to be disclosed in the employer's financial statements under GASB 50, is the excess of the actuarial accrued liability over the valuation assets. If the assets exceed the actuarial accrued liability, the surplus is reported as a negative unfunded liability.
- Two percentages are required to be disclosed in the employer's financial statements under GASB 50. The funded ratio is the valuation assets as a percent of the actuarial accrued liability. The other percentage is the unfunded actuarial accrued liability as a percent of valuation payroll.
- The number of active and nonactive participants included in the valuation. See Section F for more details on the participants included in the valuation.



## Oklahoma Municipal Retirement Fund

UAAL as Percent of Covered Payroll


## Oklahoma Municipal Retirement Fund

## COMPARISON OF PLAN ASSETS AND OBLIGATIONS

| City | Cost Method | Valuation Assets | Valuation Payroll | PVB Actives | PVB Retired | Actuarial Acc'd Liability (AAL) | Unfunded AAL (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adair | UAL | 130,722 | 166,547 | 147,064 | 148,163 | 181,851 | 51,130 | 71.9\% | 30.7\% | 7 | 6 | 11,776 |
| Altus | UAL | 13,706,405 | 5,365,391 | 14,125,530 | 6,576,913 | 17,128,211 | 3,421,806 | 80.0\% | 63.8\% | 160 | 61 | 6,739,323 |
| Alva | Surplus | 2,161,651 | 1,411,670 | 2,147,995 | 217,669 | 1,904,289 | $(257,362)$ | 113.5\% | (18.2)\% | 54 | 9 | 1,033,028 |
| Antlers | UAL | 556,962 | 714,073 | 817,591 | 256,564 | 783,916 | 226,955 | 71.0\% | 31.8\% | 33 | 11 | 326,561 |
| Ardmore | UAL | 8,440,628 | 7,274,284 | 20,257,094 | 2,015,474 | 12,499,353 | 4,058,725 | 67.5\% | 55.8\% | 186 | 47 | 6,469,113 |
| Bartesville | UAL | 5,857,260 | 7,708,287 | 14,634,795 | 5,336,849 | 13,075,211 | 7,238,944 | 44.7\% | 93.9\% | 218 | 107 | 7,759,355 |
| Bethany | UAL | 14,130,683 | 2,902,582 | 13,049,247 | 6,437,497 | 16,931,352 | 2,800,669 | 83.5\% | 96.5\% | 74 | 42 | 6,371,976 |
| Bethany/Warr Acres | UAL | 1,565,278 | 345,913 | 1,831,012 | 403,772 | 2,029,819 | 464,541 | 77.1\% | 134.3\% | 9 | 5 | 1,231,669 |
| Billings | UAL | 98,330 | 82,126 | 99,302 | 58,883 | 103,835 | 5,506 | 94.7\% | 6.7\% | 3 | 3 | 21,038 |
| Binger | UAL | 52,927 | 133,035 | 132,986 | 0 | 93,966 | 41,039 | 56.3\% | 30.8\% | 5 | 0 | 59,750 |
| Blackwell | UAL. | 4,283,691 | 1,238,372 | 4,434,685 | 1,538,130 | 5,049,018 | 765,327 | 84.8\% | 61.8\% | 37 | 31 | 2,307,179 |
| Blair | UAL | 147,042 | 118,800 | 283,120 | 0 | 172,612 | 25,570 | 85.2\% | 21.5\% | 4 | 0 | 72,325 |
| Boise City | UAL | 1,031,692 | 285,792 | 854,702 | 451,370 | 1,229,240 | 197,549 | 83.9\% | 69.1\% | 11 | 6 | 645,568 |
| Braman | UAL | 103,564 | 61,888 | 211,041 | 0 | 167,516 | 63,953 | 61.8\% | 103.3\% | 2 | 0 | 125,447 |
| Bristow | UAL | 1,836,951 | 732,032 | 2,333,183 | 573,720 | 2,218,858 | 381,907 | 82.8\% | 52.2\% | 27 | 11 | 1,141,809 |
| Broken Bow | UAL | 1,918,393 | 1,358,560 | 3,033,476 | 625,096 | 2,643,857 | 725,464 | 72.6\% | 53.4\% | 50 | 14 | 1,207,595 |
| Buffalo | Surplus | 919,805 | 202,806 | 441,717 | 568,215 | 874,430 | $(45,375)$ | 105.2\% | (22.4)\% | 9 | 5 | 222,264 |
| Burns Flat | UAL | 164,161 | 225,986 | 358,017 | 52,608 | 300,364 | 136,203 | 54.7\% | 60.3\% | 8 | 3 | 162,235 |
| Calera | UAL | 248,501 | 469,813 | 452,205 | 115,995 | -417,225 | 168,724 | 59.6\% | 35.9\% | 18 | 3 | 3186,630 |
| Central Okla MCD | UAL | 742,924 | 178,695 | 538,454 | 977,271 | 1 1,231,611 | 488,687 | 60.3\% | 273.5\% | 5 | 5 5 | 5102,682 |
|  |  |  |  |  | Dean Actu | uaries, lle |  |  |  |  |  | B3 |

## Oklahoma Municipal Retirement Fund

COMPARISON OF PLAN ASSETS AND OBLIGATIONS

| City | Cost Method | Valuation Assets | Valuation Payroll | $\begin{aligned} & \text { PVB } \\ & \text { Actives } \end{aligned}$ | PVB <br> Retired | Actuarial Acc'd Liability (AAL) | Unfunded AAL (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chandler | UAL | 847,540 | 739,134 | 1,080,690 | 270,651 | 877,315 | 29,775 | 96.6\% | 4.0\% | 26 | 10 | 325,804 |
| Checotah | UAL | 782,551 | 1,192,476 | 1,468,799 | 257,989 | 1,264,421 | 481,870 | 61.9\% | 40.4\% | 45 | 9 | 653,482 |
| Cherokee \& CDA | UAL | 64,769 | 246,654 | 100,524 | 184,127 | 243,261 | 178,492 | 26.6\% | 72.4\% | 12 | 5 | 36,318 |
| Chickasha | Surplus | 11,673,221 | 2,000,088 | 9,143,973 | 4,000,881 | 11,368,813 | $(304,408)$ | 102.7\% | (15.2)\% | 71 | 42 | 5,037,608 |
| Claremore | UAL | 11,823,029 | 5,082,599 | 13,200,195 | 3,638,308 | 13,127,455 | 1,304,426 | 90.1\% | 25.7\% | 155 | 45 | 5,779,490 |
| Cleo Springs | UAL | 75,626 | 27,213 | 123,668 | 36,809 | 160,477 | 84,850 | 47.1\% | 311.8\% | 1 | 1 | 123,668 |
| Cleveland | UAL | 1,527,770 | 490,285 | 1,760,295 | 562,694 | 1,980,224 | 452,454 | 77.2\% | 92.3\% | 14 | 10 | 1,076,324 |
| Clinton | UAL | 8,175,164 | 2,030,889 | 6,542,301 | 3,964,360 | -8,340,395 | 165,231 | 98.0\% | 8.1\% | 73 | 38 | 2,336,777 |
| Collinsville | UAL | 2,259,329 | 1,032,914 | 2,530,107 | 706,673 | 3 2,631,233 | 371,903 | 85.9\% | 36.0\% | 34 | 15 | 1,281,500 |
| Cordell | UAL | 3,233,763 | 857,476 | 2,077,087 | 2,262,335 | 3,655,330 | 421,566 | 88.5\% | 49.2\% | 27 | 24 | 833,419 |
| Cushing | UAL | 10,512,108 | 3,146,318 | 10,029,252 | 6,139,377 | 7 14,410,870 | 3,898,762 | 72.9\% | 123.9\% | 97 | 74 | 5,279,485 |
| Davis | UAL | 1,182,373 | 890,599 | 2,086,422 | 265,697 | 7 1,859,450 | 677,077 | 63.6\% | 76.0\% | 36 | 3 | 1,126,030 |
| Del City | UAL | 12,638,955 | 3,098,439 | 10,886,491 | 8,605,276 | 6 16,032,896 | 3,393,941 | 78.8\% | 109.5\% | 88 | 50 | 4,401,862 |
| Dewey | UAL | 1,082,405 | 454,547 | 734,640 | 783,386 | 6 1,136,022 | 53,617 | 95.3\% | 11.8\% | 17 | 12 | 140,227 |
| Durant | UAL | 12,503,922 | 3,977,619 | 11,769,160 | 4,534,061 | 1 12,874,545 | 370,623 | 97.1\% | 9.3\% | 122 | 49 | 4,628,655 |
| El Reno | UAL | 933,745 | 2,029,556 | 2,752,424 | 751,546 | $6 \quad 2,335,655$ | 1,401,911 | 40.0\% | 69.1\% | 62 | 12 | 698,694 |
| Eufaula | UAL | 803,055 | 633,991 | 999,179 | 222,518 | 8 910,988 | 107,933 | 88.2\% | 17.0\% | 23 | 4 | 392,662 |
| Fort Cobb | UAL | 68,407 | 108,875 | 154,760 | 10,270 | 1 128,886 | 60,480 | 53.1\% | 55.5\% | 4 | 1 | 81,651 |
| Foss Reservoir P | ks UAL | 520,515 | 172,546 | 436,668 | 407,636 | 6 754,856 | 234,342 | 69.0\% | 135.8\% | 5 | 5 | 190,356 |
| Frederick | UAL | 2,238,842 | 871,663 | 2,272,559 | 1,245,007 | $73,039,252$ | 800,410 | 73.7\% | 91.8\% | 26 | 18 | 1,174,208 |
|  |  |  |  |  | Dean actu | UARIES, lle |  |  |  |  |  | B4 |

## Oklahoma Municipal Retirement Fund

COMPARISON OF PLAN ASSETS AND OBLIGATIONS

| City | Cost Method | Valuation Assets | Valuation Payroll | PVB Actives | PVB Retired | Actuarial Acc'd Liability (AAL) | Unfunded AAL (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Garber | UAL | 30,153 | 81,574 | 50,585 | 16,575 | 34,590 | 4,437 | 87.2\% | 5.4\% | 3 | 1 | 5,494 |
| Geary | UAL. | 572,355 | 449,074 | 773,737 | 168,623 | 619,590 | 47,236 | 92.4\% | 10.5\% | 19 | 7 | 223,468 |
| Goodwell | UAL. | 58,550 | 190,289 | 129,923 | 16,130 | 100,421 | 41,871 | 58.3\% | 22.0\% | 6 | 2 | 68,412 |
| Gore and Gore PWA | UAL | 146,967 | 406,395 | 360,287 | 29,901 | 224,326 | 77,359 | 65.5\% | 19.0\% | 23 | 4 | 145,956 |
| Granite | UAL | 844,534 | 194,610 | 721,451 | 335,682 | 866,210 | 21,676 | 97.5\% | 11.1\% | 7 | 2 | 334,825 |
| Guthrie | UAL | 3,653,572 | 1,661,049 | 4,292,930 | 571,270 | 3,798,146 | 144,574 | 96.2\% | 8.7\% | 58 | 13 | 1,988,739 |
| Guymon | UAL. | 4,342,833 | 2,404,884 | 4,015,187 | 1,613,391 | 4,548,587 | 205,754 | 95.5\% | 8.6\% | 84 | 29 | 1,843,188 |
| Harrah | UAL | 972,998 | 560,144 | 1,209,945 | 587,751 | 1,324,279 | 351,281 | 73.5\% | 62.7\% | 15 | 8 | 335,107 |
| Healdton | UAL. | 784,654 | 323,491 | 834,672 | 193,641 | 794,774 | 10,120 | 98.7\% | 3.1\% | 11 | 6 | 347,202 |
| Henryetta | UAL. | 2,219,431 | 1,003,589 | 1,851,044 | 909,244 | 2,275,447 | 56,016 | 97.5\% | 5.6\% | 36 | 18 | 778,314 |
| Hooker | UAL | 413,056 | 328,626 | 822,160 | 34,884 | 701,642 | 288,587 | 58.9\% | 87.8\% | 10 | 3 | 494,215 |
| Hulbert | UAL | 195,393 | 338,132 | 293,893 | 126,756 | 318,437 | 123,044 | 61.4\% | 36.4\% | 12 | 3 | 111,414 |
| Hydro | UAL | 239,380 | 149,884 | 251,369 | 123,383 | 320,802 | 81,423 | 74.6\% | 54.3\% | 5 | 3 | 138,206 |
| Kansas | UAL | 37,992 | 71,246 | 25,218 | 63,448 | 70,879 | 32,887 | 53.6\% | 46.2\% | 3 | 3 | 2,707 |
| Kingston | UAL | 348,020 | 333,389 | 464,952 | 273,600 | -575,517 | 227,498 | 60.5\% | 68.2\% | 13 | 2 | 176,626 |
| Krebs \& Krebs Utility Auth. | UAL | 143,609 | 161,863 | 230,314 | 71,744 | 245,130 | 101,522 | 58.6\% | 62.7\% | 5 | 3 | 127,685 |
| Laverne | UAL | 667,479 | 354,186 | 546,554 | 586,403 | 3 964,109 | 296,630 | 69.2\% | 83.7\% | 14 | 11 | 251,680 |
| Lindsay | UAL | 3,250,762 | 1,333,767 | 3,563,365 | 1,261,850 | - 3,777,814 | -527,052 | 86.0\% | 39.5\% | 39 | 13 | 1,607,787 |
| Madill | UAL | 1,478,139 | 858,178 | 1,783,884 | 629,139 | 9 1,942,065 | - 463,927 | 76.1\% | 54.1\% | 27 | 9 | 851,915 |
| Mannford | UAL | 1,725,858 | 661,613 | 1,930,392 | 1,224,180 | 2,580,614 | 8 854,756 | 66.9\% | 129.2\% | 21 | 17 | 805,962 |

Oklahoma Municipal Retirement Fund COMPARISON OF PLAN ASSETS AND OBLIGATIONS

| City | Cost Method | Valuation Assets | Valuation Payroll | $\begin{gathered} \text { PVB } \\ \text { Actives } \end{gathered}$ | PVB <br> Retired | Actuarial Acc'd Liability (AAL) | Unfunded AAL (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marietta | Surplus | 648,859 | 525,382 | 633,828 | 343,440 | 597,208 | $(51,650)$ | 108.6\% | (9.8)\% | 20 | 8 | 136,272 |
| Marietta PWA | UAL. | 420,033 | 147,461 | 158,869 | 585,945 | 650,761 | 230,727 | 64.5\% | 156.5\% | 5 | 5 | 45,025 |
| McLoud | UAL | 261,825 | 383,489 | 284,839 | 205,303 | 325,395 | 63,570 | 80.5\% | 16.6\% | 19 | 9 | 53,723 |
| Medford | UAL | 1,184,741 | 327,567 | 1,466,689 | 528,762 | 1,747,737 | 562,996 | 67.8\% | 171.9\% | 10 | 3 | 672,501 |
| Meeker | UAL | 323,050 | 253,364 | 380,204 | 117,836 | 351,790 | 28,740 | 91.8\% | 11.3\% | 10 | 4 | 112,486 |
| Mooreland | UAL | 854,705 | 237,616 | 1,049,420 | 168,438 | 1,088,993 | 234,288 | 78.5\% | 98.6\% | 7 | 4 | 724,064 |
| Mountain Park MCD | UAL | 542,960 | 154,124 | 886,539 | 29,271 | 826,952 | 283,991 | 65.7\% | 184.3\% | 5 | 1 | 569,898 |
| Muldrow | UAL | 893,401 | 533,847 | 1,201,154 | 345,668 | 1,144,676 | 251,275 | 78.0\% | 47.1\% | 19 | 8 | 455,399 |
| Mustang | UAL | 2,660,658 | 1,590,025 | 4,588,086 | 645,536 | 3,985,112 | 1,324,454 | 66.8\% | 83.3\% | 35 | 10 | 2,224,949 |
| Newkirk | UAL | 1,199,335 | 414,899 | 1,359,825 | 744,212 | 1,840,583 | 641,248 | 65.2\% | 154.6\% | 13 | 12 | 695,454 |
| Nichols Hills | UAL | 4,469,828 | 1,584,844 | 5,973,673 | 2,001,958 | 6,548,341 | 2,078,513 | 68.3\% | 131.1\% | 38 | 20 | 3,025,454 |
| Noble | UAL | 758,642 | 660,183 | 853,208 | 572,455 | 998,127 | 239,485 | 76.0\% | 36.3\% | 19 | 8 | 197,082 |
| Nowata | UAL | 1,152,412 | 892,389 | 1,387,641 | 525,860 | 1,156,390 | 3,977 | 99.7\% | 0.4\% | 37 | 21 | 358,031 |
| Oilton | UAL | 201,939 | 185,658 | 253,196 | 113,495 | 264,508 | 62,569 | 76.3\% | 33.7\% | 8 | 3 | 73,248 |
| Okeene | UAL | 510,532 | 218,695 | 470,531 | 179,237 | 515,019 | 4,487 | 99.1\% | 2.1\% | 7 | 5 | 153,846 |
| Okemah | UAL | 400,719 | 521,260 | 501,725 | 132,197 | 481,019 | 80,300 | 83.3\% | 15.4\% | 23 | 7 | 211,008 |
| Oklahoma Municipal League | Surplus | 4,329,391 | 755,019 | 3,430,424 | 1,476,642 | 4,313,634 | $(15,757)$ | 100.4\% | (2.1)\% | 16 | 15 | 2,284,705 |
| Okmulgee | Surplus | 9,896,535 | 2,934,379 | 8,060,352 | 3,819,490 | 9,520,683 | $(375,852)$ | 103.9\% | (12.8)\% | 99 | 42 | 3,194,998 |
| OMRF | UAL | 145,435 | 444,711 | 547,205 | 3,832 | 165,873 | 20,439 | 87.7\% | - 4.6\% | 9 | 0 | - 70,250 |
| Owasso | UAL | 6,931,144 | 5,212,213 | 9,595,476 | 2,191,708 | 7,862,597 | 931,453 | 88.2\% | - 17.9\% | 131 | - 36 | - 3,318,064 |

Okiahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

| City | Cost Method | Valuation Assets | Valuation Payroll | PVB Actives | PVB Retired | Actuarial Acc'd Liability (AAL) | Unfunded AAL (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pawnee | UAL | 1,318,647 | 644,080 | 1,380,529 | 683,956 | 1,530,244 | 211,597 | 86.2\% | 32.9\% | 21 | 12 | 495,487 |
| Perkins | UAL | 583,090 | 354,126 | 542,725 | 589,014 | 798,820 | 215,730 | 73.0\% | 60.9\% | 14 | 6 | 84,159 |
| Perry | UAL | 2,405,328 | 1,570,520 | 3,177,832 | 550,599 | 2,646,223 | 240,896 | 90.9\% | 15.3\% | 57 | 13 | 1,360,198 |
| Pond Creek | UAL | 399,216 | 238,652 | 512,386 | 285,190 | 713,516 | 314,300 | 56.0\% | 131.7\% | 9 | 5 | 299,850 |
| Porum | UAL | 0 | 237,140 | 189,122 | 0 | 127,641 | 127,641 | 0.0\% | 53.8\% | 7 | 0 | 70,058 |
| Poteau | UAL | 3,813,529 | 1,605,373 | 3,792,652 | 1,795,480 | 4,684,186 | 870,657 | 81.4\% | 54.2\% | 58 | 21 | 1,748,435 |
| Ratiff City | UAL | 21,848 | 106,268 | 68,097 | 533 | 48,717 | 26,869 | 44.8\% | 25.3\% | 5 | 0 | 34,692 |
| Ringling | UAL | 116,626 | 106,635 | 90,253 | 120,357 | 171,759 | 55,133 | 67.9\% | 51.7\% | 4 | 4 | 24,053 |
| Roland | UAL | 279,301 | 643,071 | 636,933 | 192,010 | 558,034 | 278,733 | 50.1\% | 43.3\% | 20 | 9 | 181,622 |
| Sallisaw | UAL | 8,665,670 | 2,913,231 | 10,650,881 | 4,308,947 | 12,662,631 | 3,996,960 | 68.4\% | 137.2\% | 93 | 34 | 5,494,863 |
| Seiling | UAL | 584,019 | 241,611 | 587,399 | 279,264 | 697,326 | 113,307 | 83.8\% | 46.9\% | 8 | 5 | 306,180 |
| Shawnee | UAL | 24,092,460 | 5,724,277 | 22,683,333 | 12,810,293 | 30,145,970 | 6,053,511 | 79.9\% | 105.8\% | 158 | 63 | 10,499,338 |
| Spencer | UAL | 709,953 | 299,677 | 390,003 | 562,359 | 715,400 | 5,446 | 99.2\% | 1.8\% | 11 | 12 | 79,689 |
| Spiro | UAL | 690,224 | 412,176 | 637,706 | 446,333 | 907,000 | 216,775 | 76.1\% | 52.6\% | 16 | 8 | 286,883 |
| Stilwell | UAL | 3,047,554 | 2,552,347 | 6,131,939 | 1,193,443 | 5,863,604 | 2,816,050 | 52.0\% | 110.3\% | 83 | 18 | 2,934,762 |
| Stratford | Surplus | 102,536 | 234,988 | 107,186 | 12,579 | 71,631 | $(30,905)$ | 143.1\% | (13.2)\% | 13 | 1 | 39,103 |
| Stroud | UAL | 2,261,072 | 1,013,934 | 1,465,521 | 1,615,570 | 2,579,015 | 317,943 | 87.7\% | 31.4\% | 38 | 25 | 594,621 |
| Sulphur | UAL | 2,371,392 | 752,620 | 2,959,435 | 550,923 | 2,968,442 | 597,050 | 79.9\% | 79.3\% | 25 | 13 | 1,700,160 |
| Talihina \& TPWA | UAL | 252,113 | 357,299 | 432,267 | 70,933 | 406,341 | 154,228 | 62.0\% | 43.2\% | 17 | 2 | 225,315 |
| Thomas | UAL | 719,587 | 186,601 | 758,697 | 274,232 | 942,532 | 222,945 | 76.3\% | 119.5\% | 7 | 7 | 563,218 |

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

| City | Cost Method | Valuation Assets | Valuation Payroll | PVB <br> Actives | PVB <br> Retired | Actuarial Acc'd Liability (AAL) | Unfunded AAL <br> (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tipton | UAL | 63,713 | 103,218 | 95,328 | 1,965 | 78,336 | 14,623 | 81.3\% | 14.2\% | 5 | 0 | 56,698 |
| Tishomingo | UAL | 128,520 | 264,028 | 297,131 | 149,924 | 354,837 | 226,318 | 36.2\% | 85.7\% | 12 | 6 | 136,323 |
| Tonkawa | UAL | 1,911,946 | 716,814 | 1,678,226 | 953,680 | 2,090,535 | 178,589 | 91.5\% | 24.9\% | 22 | 13 | 676,855 |
| Velma | UAL | 137,280 | 90,155 | 108,174 | 101,366 | 160,226 | 22,946 | 85.7\% | 25.5\% | 3 | 4 | 29,107 |
| Vian | UAL | 73,802 | 237,470 | 65,024 | 68,328 | 79,313 | 5,510 | 93.1\% | 2.3\% | 10 | 4 | 4,638 |
| Vinita | UAL | 5,316,615 | 1,636,691 | 5,349,532 | 3,004,464 | 6,826,429 | 1,509,815 | 77.9\% | 92.2\% | 58 | 27 | 2,567,034 |
| Wakita | UAL | 122,144 | 79,796 | 176,403 | 11,432 | 160,053 | 37,909 | 76.3\% | 47.5\% | 3 | 1 | 117,923 |
| Warr Acres | UAL. | 4,123,584 | 986,150 | 3,493,802 | 2,382,505 | 5,333,778 | 1,210,194 | 77.3\% | 122.7\% | 31 | 23 | 1,928,799 |
| Watonga | UAL | 3,218,899 | 853,657 | 2,579,792 | 2,381,290 | 4,301,526 | 1,082,627 | 74.8\% | 126.8\% | 30 | 21 | 1,210,799 |
| Waukomis | Surplus | 253,169 | 153,976 | 266,354 | 37,821 | 221,960 | $(31,209)$ | 114.1\% | (20.3)\% | 6 | 2 | 122,987 |
| Waurika | Surplus | 644,436 | 241,024 | 401,225 | 430,608 | 626,251 | $(18,185)$ | 102.9\% | (7.5)\% | 9 | 5 | 132,570 |
| Weatherford | UAL | 661,603 | 2,202,808 | 3,418,130 | 377,717 | 2,279,456 | 1,617,853 | 29.0\% | 73.4\% | 77 | 5 | 1,218,900 |
| Webbers Falls | UAL | 70,181 | 282,710 | 86,648 | 77,521 | 118,106 | 47,925 | 59.4\% | 17.0\% | 19 | 8 | 27,202 |
| Welliston | UAL | 294,981 | 194,719 | 214,446 | 254,720 | 353,321 | 58,340 | 83.5\% | 30.0\% | 8 | 5 | 37,842 |
| Westville Utility Authority | Surplus | 153,200 | 249,632 | 291,200 | 16,770 | 128,176 | $(25,024)$ | 119.5\% | (10.0)\% | 8 | 1 | 48,452 |
| Wetumka | UAL | 845,616 | 327,753 | 1,075,116 | 679,410 | 1,551,508 | 705,892 | 54.5\% | 215.4\% | 15 | 12 | 628,655 |
| Yale | UAL | 1,178,774 | 318,022 | 817,205 | 617,633 | 1,202,616 | 23,843 | 98.0\% | 7.5\% | 15 | 7 | 425,301 |
| Yukon | UAL | 11,395,857 | 5,243,415 | 13,973,924 | 6,951,440 | 17,035,288 | 5,639,430 | 66.9\% | 107.6\% | 121 | 79 | 6,007,189 |
| Total |  | 283,985,024 | 124,280,308 | 319,149,716 | 133,613,275 | $5358,778,409$ | 74,793,385 | 79.2\% | 60.2\% | 3,915 | 1,654 |  |

Totals exclude plans with only nonactive participants.

Oklahoma Municipal Retirement Fund

## COMPARISON OF PLAN ASSETS AND OBLIGATIONS

|  | Cost | Valuation | Valuation | PVB | PVB | Actuarial Acc'd | Unfunded AAL (UAAL) | Funded Ratio | UAAL as \% of Val Pay | Actives | Nonactives | Accum Benefit Obligat'n (ABO) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| City | Method | Assets | Payroll |  |  | Liability (AAL) |  |  |  | Actives | Nonactives |  |

## C

## Funded Status of Plans with No Active Participants

## C Funded Status of Plans with No Active Participants

There are 11 plans that no longer have employees accruing benefits under the plan, but still have assets in the OMRF Master Trust for paying benefits to nonactive participants. The following pages show key financial information for each of these plans:

- The number of participants due benefits from the Trust, both in total and by category. The categories of nonactive participants are retirees receiving benefits, beneficiaries of deceased participants entitled to benefits, participants receiving disability benefits, and vested participants entitled to future benefits. See Section F for more details on the nonactive participants.
- The present value of benefits. This is the total of all future benefits expected to be paid to plan participants as of January 1, 2009, discounted to the valuation date at the assumed rate of return $(7.5 \%)$. The present value of benefits is shown separately by category of nonactive participants. This amount should be disclosed as the actuarial accrued liability in the employer's financial statements under GASB 50.
- The market value of assets. This amount should be disclosed as the actuarial value of assets in the employer's financial statements under GASB 50. See Section D for more detail on the trust fund activity during 2008.
- The deficiency (or surplus). This is the excess of the plan obligations, measured as the present value of benefits, over the market value of assets. If the assets exceed the obligations, the surplus is reported as a negative amount. This amount should be disclosed as the unfunded actuarial accrued liability in the employer's financial statements under GASB 50.
- The funded percentage. This is the market value of assets as a percent of the plan obligations. This amount should be disclosed as the funded ratio in the employer's financial statements under GASB 50.
- The plan funding requirement. If plan obligations exceed assets, the annual payment required to amortize the deficiency over a specified number of years is reported.

Oklahoma Municipal Retirement Fund

Funded Status of Nonactive Plans


## Oklahoma Municipal Retirement Fund Employee Retirement System of Chouteau, Oklahoma

## FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value <br> of Benefits |
| :--- | ---: | ---: |
| Retirees | 2 | 0 |
| Survivors | 0 | 017,975 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 2 | $\$ 17,975$ |
| Market Value of Assets |  | $\mathbf{\$ 1 6 , 4 4 7}$ |
| Deficiency (Surplus) | $\mathbf{\$ 1 , 5 2 8}$ |  |
| Funded Percentage |  | $\mathbf{9 1 \%}$ |

Plan assets are not currently sufficient.

## Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1,2009 sufficient to amortize the funding deficiency $\$ 223$

Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | none |
| Retirement Age <br> for Deferred Vested | 65 |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Comanche, Oklahoma

FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value <br> of Benefits |
| :--- | ---: | ---: |
| Retirees | 1 | $\$ 101,830$ |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 1 | $\$ 101,830$ |
| Market Value of Assets | $\$ 47,463$ |  |
| Deficiency (Surplus) | $\$ 54,367$ |  |
| Funded Percentage |  |  |
| Plan assets are not currently sufficient. | $47 \%$ |  |
| Plan Funding Requirement |  |  |
| Annual contribution payable for 5 years commencing |  |  |
| July 1, 2009 sufficient to amortize the funding deficiency |  |  |

Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | none |
| Retirement Age <br> for Deferred Vested | 65 |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Fairfax, Oklahoma

## FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value of Benefits |
| :---: | :---: | :---: |
| Retirees | 4 | \$40,778 |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 4 | \$40,778 |
| Market Value of Assets |  | \$143,791 |
| Deficiency (Surplus) |  | (\$103,013) |
| Funded Percentage |  | 353\% |
| Plan assets are currently sufficient. |  |  |
| Plan Funding Requirement |  |  |
| Annual contribution pay July 1, 2009 sufficient to | ars comm funding | N/A |

## Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | none |
| Retirement Age <br> for Deferred Vested | 65 |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Fairview, Oklahoma

## FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value <br> of Benefits |
| :--- | ---: | ---: |
| Retirees | 2 | $\$ 121,123$ <br> Survivors$\quad 2$ |
| Disabled | 0 | 45,715 |
| Deferred Vested | 0 | 0 |
| Totals | 4 | 0 |
| Market Value of Assets |  | $\mathbf{\$ 1 6 6 , 8 3 8}$ |
| Deficiency (Surplus) | $\mathbf{\$ 3 6 6 , 1 8 1}$ |  |
| Funded Percentage | $\mathbf{( \$ 1 9 9 , 3 4 3 )}$ |  |
| Plan assets are currently sufficient. |  |  |

## Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2009 sufficient to amortize the funding deficiency

N/A

## Actuarial Basis

Interest rate
Mortality
Cost of Living Adjustments
Retirement Age for Deferred Vested
$7.5 \%$ per annum
UP 94 mortality (projected)
$3 \%$ per annum
65

## Oklahoma Municipal Retirement Fund Employee Retirement System of Muskogee, Oklahoma

FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value of Benefits |
| :---: | :---: | :---: |
| Retirees | 8 | \$70,430 |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 8 | \$70,430 |
| Market Value of Assets |  | \$48,300 |
| Deficiency (Surplus) |  | \$22,130 |
| Funded Percentage |  | 69\% |
| Plan assets are not currently sufficient. |  |  |
| Plan Funding Requirement |  |  |
| Annual contribution pay July 1, 2009 sufficient to | ars comm funding | \$3,224 |

Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | $3 \%$ per annum |
| Retirement Age <br> for Deferred Vested | 65 |

## Oklahoma Municipal Retirement Fund

## Employee Retirement System of Norman, Oklahoma

## FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value <br> of Benefits |
| :--- | ---: | ---: |
| Retirees | 14 | $\$ 985,173$ |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 14 | $\$ 985,173$ |
| Market Value of Assets | $\$ 601,476$ |  |
| Deficiency (Surplus) | $\$ 383,697$ |  |
| Funded Percentage |  |  |
| Plan assets are not currently sufficient. | $\mathbf{6 1 \%}$ |  |
| Plan Funding Requirement |  |  |
| Annual contribution payable for 10 years commencing |  |  |
| July 1, 2009 sufficient to amortize the funding deficiency |  |  |

Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | none |
| Retirement Age <br> for Deferred Vested | 65 |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Prague, Oklahoma

FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value <br> of Benefits |
| :--- | ---: | ---: |
| Retirees | 0 | $\$ 0$ |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 0 | $\$ 0$ |
| Market Value of Assets |  | $\$ 34,899$ |
| Deficiency (Surplus) | $\mathbf{( \$ 3 4 , 8 9 9 )}$ |  |
| Funded Percentage |  |  |
| Plan assets are currently sufficient. |  |  |

## Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2009 sufficient to amortize the funding deficiency

## Actuarial Basis

Interest rate
Mortality
Cost of Living Adjustments
Retirement Age for Deferred Vested

for Defred Vested

$7.5 \%$ per annum
UP 94 mortality (projected)
none
65

## Oklahoma Municipal Retirement Fund

## Employee Retirement System of Skiatook, Oklahoma

## FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value <br> of Benefits |
| :--- | ---: | ---: |
| Retirees | 2 | $\$ 87,850$ |
| Survivors | 2 | 72,494 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 4 | $\$ 160,344$ |
| Market Value of Assets | $\$ 152,075$ |  |
| Deficiency (Surplus) | $\$ 8,269$ |  |
| Funded Percentage |  |  |
| Plan assets are not currently sufficient. | $\mathbf{9 5 \%}$ |  |
| Plan Funding Requirement |  |  |
| Annual contribution payable for 10 years commencing |  |  |
| July 1, 2009 sufficient to amortize the funding deficiency |  |  |

Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | $2 \%$ per annum |
| Retirement Age | 65 |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Stillwater, Oklahoma

FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value of Benefits |
| :---: | :---: | :---: |
| Retirees | 5 | \$102,921 |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 5 | \$102,921 |
| Market Value of Assets |  | \$4,070,506 |
| Deficiency (Surplus) |  | (\$3,967,585) |
| Funded Percentage |  | 3955\% |
| Plan assets are currently sufficient. |  |  |
| Plan Funding Requirement |  |  |
| Annual contribution payable for 10 years commencing July 1,2009 sufficient to amortize the funding deficiency |  | N/A |
| Actuarial Basis |  |  |
| Interest rate $\quad 7.5 \%$ per annum |  |  |
| Mortality UP 94 mortality (projected) |  |  |
| Cost of Living Adjustments 3\% per annum |  |  |
| Retirement Agefor Deferred Vested |  |  |

Oklahoma Municipal Retirement Fund
Employee Retirement System of Stillwater Medical Center, Oklahoma

FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value of Benefits |
| :---: | :---: | :---: |
| Retirees | 2 | \$82,926 |
| Survivors | 0 | 0 |
| Disabled | 0 | 0 |
| Deferred Vested | 0 | 0 |
| Totals | 2 | \$82,926 |
| Market Value of Assets |  | \$435,135 |
| Deficiency (Surplus) |  | $(\$ 352,209)$ |
| Funded Percentage |  | 525\% |
| Plan assets are currently sufficient. |  |  |
| Plan Funding Requirement |  |  |
| Annual contribution paya July 1, 2009 sufficient to | ars comm funding | N/A |

## Actuarial Basis

Interest rate
Mortality
Cost of Living Adjustments
Retirement Age
7.5 \% per annum

UP 94 mortality (projected)
$3 \%$ per annum
65
for Deferred Vested

## Oklahoma Municipal Retirement Fund Employee Retirement System of Tecumseh, Oklahoma

FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2009

|  | Count | Present Value of Benefits |
| :---: | :---: | :---: |
| Retirees | 2 | \$48,472 |
| Survivors | 0 | 0 |
| Disabled | 2 | 36,935 |
| Deferred Vested | 4 | 51,404 |
| Totals | 8 | \$136,811 |
| Market Value of Assets |  | \$128,522 |
| Deficiency (Surplus) |  | \$8,289 |
| Funded Percentage |  | 94\% |
| Plan assets are not currently sufficient. |  |  |
| Plan Funding Requirement |  |  |
| Annual contribution paya July 1, 2009 sufficient to | rs comm funding | \$1,208 |

## Actuarial Basis

| Interest rate | $7.5 \%$ per annum |
| :--- | :--- |
| Mortality | UP 94 mortality (projected) |
| Cost of Living Adjustments | none |
| Retirement Age <br> for Deferred Vested | 65 |

D

## Development of the

## Actuarial Value of Assets

## D Development of the Actuarial Value of Assets

This section shows the development of the actuarial value of assets as of January 1, 2009.
For pension plans with active participants, the actuarial value of assets is related to market value, but smoothed to reduce the volatility of contribution requirements. The actuarial value of assets is developed as follows:

- A preliminary actuarial value of assets is determined by adjusting the prior year's value for cash flows and interest at the valuation rate.
- This amount is compared to the current market value to determine the market value adjustment. This adjustment is one fourth of the difference between the current market value and the preliminary actuarial value. However, if the resulting actuarial value of assets would not be within a specified corridor of the market value, an additional market value adjustment is included to bring the actuarial value of assets within this corridor. The method for determining the actuarial asset value was changed from prior years by increasing the corridor from $20 \%$ to $30 \%$.
- The actuarial value of assets is equal to the preliminary actuarial value plus the market value adjustment.
For pension plans with only nonactive participants, and for all retiree medical plans, the actuarial value of assets is equal to the current market value. The market value adjustment for these plans is the total difference between the current market value and the preliminary actuarial value.

For most plans, the actuarial value of assets also serves as the valuation assets. In a hybrid plan, however, some or all of the employee contributions are used to provide additional benefits, and these amounts are not available to pay the regular retirement benefits. For plans that have adopted the hybrid provision, therefore, the total value of the employee hybrid accounts (accumulated hybrid contributions with interest) is subtracted from the actuarial value of assets to determine valuation assets.

Oklahoma Municipal Retirement Fund

## Historical Return on Plan Assets



Actuarial Value of Assets as Percent of Market Value


DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

| City | Cliyno |  | Market Value of Assets as of $1 / 1 / 07$ | Actuarial Value of Assets as of $1 / 1 / 07$ | Market Value of Assets as of 1/1/08 | Actuarial Value of Assets as of $1 / 1 / 08$ | Employer | $\begin{aligned} & \text { Contributions } \\ & \hline \text { Employee } \end{aligned}$ | Buybacks | Distributions | Assumed Yield at Valuation Rate (7.5\%) | Preliminary Actuarial Value | Market Value of Assets as of 1/1/08 | Market Value Adjustment | Actuarial Value of Assets as of $1 / 1 / 08$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adair | 122 | 1 | 111.501 | 110,354 | 117,408 | 116,073 | 12,208 | 5,658 | 0 | (12) | 9,375 | 143,302 | 100,555 | $(12,580)$ | 130,722 |
| Alus | 44 | 2 | 13,848,829 | 13,891.579 | 14,408,435 | 14,409,141 | 478,049 | 214,425 | 0 | (704,364) | 1.080,240 | 15,477,491 | 10,543,389 | $(1,771,085)$ | 13,706,405 |
| Alva | 2 | 3 | 2,232,255 | 2,228.017 | 2,301,543 | 2,290,086 | 3,194 | 0 | 0 | (27,717) | 170,837 | 2,436,400 | 1.662,808 | (274,749) | 2.161,651 |
| Antlers | 111 | 4 | 466,398 | 463,718 | 536,141 | 533,669 | 39,990 | 21,121 | 0 | (20,770) | 41,538 | 615,549 | 428,432 | $(58,587)$ | 556,962 |
| Ardmore | 156 | 5 | 5,530,995 | 5,417,663 | 7,053,191 | 6,971,159 | 1.485,544 | 308,176 | 0 | (215,863) | 582,007 | 9,131,024 | 6,492,791 | $(690,396)$ | 8.440,628 |
| Bartiesville | 127 | 6 | 4,733,410 | 4,680,888 | 5,532,372 | 5,496,136 | 824,833 | 242,398 | 0 | (529,165) | 432,388 | 6,468,590 | 4,505,584 | $(609,330)$ | 5,857,260 |
| Bethany ${ }^{*}$ | 4 | 7 | 15,517,837 | 15,475,137 | 16,640,568 | 16,572,962 | 536,348 | 132,605 | 0 | ( 586,473 ) | 1,246,065 | 17,901,507 | 12,247,773 | $(1,979,403)$ | 15,922,105 |
| BethanyMarr Acres | 62 | 8 | 1,485,513 | 1,485.896 | 1,616,892 | 1,605,950 | 35,523 | 16,573 | 0 | $(26,932)$ | 121,390 | 1,752,505 | 1,204,060 | $(187,227)$ | 1,565,278 |
| Billings | 24 | 9 | 90,671 | 90,121 | 97,838 | 97,321 | 5,781 | 3,288 | 0 | $(4,295)$ | 7,478 | 109.572 | 75,638 | $(11,243)$ | 98,330 |
| Binger | 126 | 10 | 46,953 | 46,093 | 56,178 | 55,453 | 4,331 | 1,781 | 0 | $(7,192)$ | 4,118 | 58,491 | 40,713 | (5,565) | 52,927 |
| Blackwell | 45 | 11 | 4,810,841 | 4,828,089 | 4,817,285 | 4,814,080 | 106.719 | 53,951 | 0 | (454,616) | 350,033 | 4,870,159 | 3,295,147 | $(586,468)$ | 4,283,691 |
| Blair | 101 | 12 | 120,683 | 119,804 | 140,805 | 139,975 | 7,983 | 4.037 | 0 | 0 | 10,949 | 162,944 | 113,109 | $(15,902)$ | 147,042 |
| Soise City | 90 | 13 | 1,006,839 | 1,000,885 | 1,095,922 | 1,088,913 | 22,430 | 0 | 0 | $(32,357)$ | 81,296 | 1,160,282 | 793.609 | $(128,591)$ | 1,031,692 |
| Braman | 129 | 14 | 77,817 | 76,453 | 95,438 | 94,323 | 8,044 | 3,704 | 0 | 0 | 7,515 | 113,586 | 79,664 | $(10,022)$ | 103,564 |
| Bristow | 95 | 15 | 1,631,625 | 1,613,898 | 1,841,567 | 1,823,908 | 96,080 | 43,511 | 0 | $(62,684)$ | 139,677 | 2,040,492 | 1,413,039 | (203,541) | 1,836,951 |
| Broken Bow | 99 | 16 | 1,596,608 | 1,579,674 | 1,869,231 | 1,853,705 | 122,717 | 62,856 | 0 | $(55,680)$ | 143,899 | 2,127,497 | 1,475,687 | $(209,103)$ | 1,918,393 |
| Buffialo | 55 | 17 | 985,371 | 988,158 | 1,020,299 | 1,019,911 | 14,440 | 5,946 | 0 | $(68,362)$ | 74,694 | 1,046,630 | 707,542 | ( 126,825 ) | 919,805 |
| Burns Flat | 128 | 18 | 125,323 | 123,057 | 149,283 | 147,504 | 18,201 | 6,596 | 0 | $(4,466)$ | 11,825 | 179,661 | 126,277 | $(15,500)$ | 164,161 |
| Calera | 125 | 19 | 202,172 | 198,827 | 235,053 | 232,124 | 25,515 | 10,303 | 0 | (13,484) | 18,247 | 272,705 | 191,155 | (24.204) | 248,501 |
| Checotah | 85 | 20 | 727,995 | 725.727 | 795,680 | 792,492 | 46,888 | 11,600 | 0 | $(72,875)$ | 58,897 | 837,003 | 571,480 | $(94,079)$ | 742,924 |
| Chandler | 13 | 21 | 816,051 | 810,600 | 922,813 | 917,000 | 42,849 | 27,420 | 0 | $(96,226)$ | 67,802 | 958,845 | 651,954 | (111,305) | 847,540 |
| Checotah | 145 | 22 | 584,975 | 563,397 | 719,429 | 701,785 | 86,620 | 36,188 | 0 | $(38,553)$ | 55,981 | 847,022 | 601,962 | $(64,471)$ | 782,551 |
| Cherokee \& CDA | 164 | 23 | 31,925 | 31,229 | 59,887 | 59,481 | 25,616 | 6,777 | 0 | $(24,203)$ | 4,768 | 72,439 | 49,822 | $(7,670)$ | 64,769 |
| Chickasha | 46 | 24 | 12,037,990 | 12,045,396 | 12,557,587 | 12,531,335 | 91,859 | 51,019 | 0 | $(391,287)$ | 930,535 | 13,213,459 | 8,979,401 | $(1,540,238)$ | 11,673,221 |
| Claremore | 7 | 25 | 11,361,814 | 11,306,187 | 12,225,141 | 12,159,606 | 584,060 | 201,732 | 0 | (597,615) | 919,027 | 13,266,811 | 9,094,637 | $(1,443,782)$ | 11,823,029 |
| Cleo Springs | 103 | 26 | 72.679 | 71,808 | 78.019 | 77,146 | 3,184 | 1,013 | 0 | $(3,064)$ | 5.828 | 84,108 | 58,174 | $(8,482)$ | 75,626 |
| Cleveland | 53 | 27 | 1,491,574 | 1,486,725 | 1,601,713 | 1,594,653 | 64,287 | 14,953 | 0 | (77,836) | 119,652 | 1,715,709 | 1,175,208 | $(187,939)$ | 1,527,770 |
| Clinton | 14 | 28 | 8,210,485 | 8,221,270 | 8,709,039 | 8,699,224 | 120,943 | 106,898 | 0 | (329,132) | 648,643 | 9,246,576 | 6,288,588 | (1,071,412) | 8,175,164 |
| Collinsville | 8 | 29 | 2,176,546 | 2,167,340 | 2,350,482 | 2,337,754 | 67,134 | 41,975 | 0 | (87,856) | 176,129 | 2,535,135 | 1,737,946 | $(275,806)$ | 2,259,329 |
| Cordell | 9 | 30 | 3,315,852 | 3,318,426 | 3,478,054 | 3,472,019 | 89,239 | 0 | 0 | (160,479) | 257,730 | 3,658,509 | 2,487,510 | $(424,746)$ | 3,233,763 |
| Cushing | 48 | 31 | 10,492,909 | 10,474,041 | 11,237,895 | 11,198,841 | 471,819 | 0 | 0 | $(646,966)$ | 833,345 | 11,857,039 | 8,086,237 | (1,344,930) | 10,512,108 |
| Davis | 80 | 32 | 1,099.388 | 1,098,305 | 1,179,057 | 1,175,837 | 57,636 | 35,095 | 0 | $(36,775)$ | 90,286 | 1.322,079 | 909,518 | $(139,706)$ | 1,182,373 |
| Del City ${ }^{+}$ | 10 | 33 | 13,544,581 | 13,554,095 | 14,218,851 | 14,194,275 | 268,969 | 0 | 0 | (1,007,624) | 1,036,871 | 14,492,491 | 9,810,359 | $(1,739,025)$ | 12,753,466 |
| Dewey | 11 | 34 | 1,159,886 | 1.167.004 | 1.204.575 | 1,207,403 | 13,531 | 19,341 | 0 | $(92,126)$ | 88,333 | 1,236,482 | 832,619 | (154.077) | 1.082,405 |
| Durant | 40 | 35 | 11,939,553 | 11.929,707 | 13,004,183 | 12.971,609 | 446,338 | 0 | 0 | (320,331) | 977,596 | 14,075,212 | 9,618,402 | $(1,571,290)$ | 12,503,922 |

dEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

| City c | Cityno | Market Value of Assets as of 1/1/07 |  | Actuarial Value of Assets as of $1 / 1 / 07$ | Market Value of Assets as of $1 / 1 / 08$ | Actuarial Value of Assets as of $1 / 1 / 08$ | Contributions |  |  | Distributions | Assumed Yield at Valuation Rate ( $7.5 \%$ ) | Preliminary Actuarial Value | Market Value of Assets as of 1/1/08 | Market Value Adjustment | Actuarial Value of Assets as of $1 / 1 / 08$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Employer |  |  | Employee | Buybacks |  |  |  |  |  |  |
| El Reno | 158 | 36 | 412,794 |  | 404,352 | 683,542 | 679.400 | 202,589 | 103,950 | 0 | $(43,131)$ | 60,833 | 1,003,641 | 724,055 | $(69.896)$ | 933,745 |
| Eufaula | 98 | 37 | 735,848 | 731,287 | 814,253 | 809,258 | 27,371 | 22,280 | 0 | (24.061) | 61,654 | 896.501 | 617,735 | $(93,446)$ | 803,055 |
| Fort cobb | 149 | 38 | 49,432 | 47,770 | 63,590 | 62,286 | 7,918 | 2,965 | 0 | (3,742) | 4,939 | 74,367 | 52,621 | $(5,960)$ | 68,407 |
| Foss Reservoir PWA | 74 | 39 | 540,550 | 537,447 | 556.438 | 552.318 | 24,150 | 7,044 | 0 | $(40,185)$ | 41,087 | 584,415 | 400,396 | (63,900) | 520,515 |
| Frederick | 114 | 40 | 2,127,868 | 2,116,425 | 2,346,873 | 2,335,120 | 119,531 | 39,813 | 0 | ( 152,545 ) | 175,389 | 2,517,309 | 1,722,186 | (278,467) | 2,238,842 |
| Garber | 135 | 41 | 25,739 | 25.058 | 30,468 | 29,903 | 1,891 | 1,584 | 0 | $(2,488)$ | 2,280 | 33,171 | 23,195 | (3.018) | 30,153 |
| Geary | 50 | 42 | 553,133 | 551,952 | 580,324 | 577.747 | 26,429 | 11,339 | 0 | $(19,634)$ | 44,011 | 639,892 | 440,273 | (67,537) | 572,355 |
| Goodwell | 160 | 43 | 31,925 | 31,175 | 44,914 | 44,440 | 10,358 | 4,276 | 0 | 0 | 3,882 | 62,956 | 45,332 | $(4,406)$ | 58,550 |
| Gore and Gore PWA | 151 | 44 | 106,765 | 103,435 | 133,926 | 131,236 | 15,840 | 11,639 | 0 | (10,251) | 10,489 | 158,953 | 113,052 | $(17,986)$ | 146,967 |
| Granite | 61 | 45 | 861,587 | 860,431 | 902,417 | 899.594 | 10,976 | 7,784 | 0 | $(31,586)$ | 66,989 | 953,757 | 649,642 | (109,223) | 844,534 |
| Guthrie | 12 | 46 | 3,898,388 | 3,897,896 | 4,193,061 | 4,182,670 | 53,349 | 60,936 | 0 | $(441,459)$ | 301.431 | 4,156,927 | 2,810,440 | $(503,355)$ | 3,653,572 |
| Guymon | 67 | 47 | 4,312,598 | 4,287,082 | 4,591.595 | 4,560,310 | 173,637 | 0 | 0 | (200,095) | 341,031 | 4,874,883 | 3.340,641 | $(532,050)$ | 4,342,833 |
| Harrah | 109 | 48 | 868,689 | 860,483 | 988,102 | 979,806 | 63,504 | 27,783 | 0 | $(61,854)$ | 74,589 | 1,083,828 | 748,460 | (110,830) | 972,998 |
| Healdton | 75 | 49 | 739,236 | 731,482 | 804,448 | 796,562 | 27,154 | 13,547 | 0 | (24,177) | 60,364 | 873,510 | 603,580 | (88,856) | 784,654 |
| Henryetta | 63 | 50 | 2,300,697 | 2,303,757 | 2,438,489 | 2,435,857 | 59,483 | 6,273 | 0 | $(150,406)$ | 179.515 | 2,530,722 | 1,707,255 | ( 311,291 ) | 2,219,431 |
| Hooker | 120 | 51 | 338,709 | 333,835 | 389,354 | 385,373 | 32,683 | 10,464 | 0 | $(4,528)$ | 30,351 | 454,343 | 317,735 | (41,288) | 413,056 |
| Hulbert | 137 | 52 | 142,977 | 137,230 | 175,975 | 171,225 | 28,169 | 7,581 | 0 | $(10,356)$ | 13,784 | 210.414 | 150,330 | (15,021) | 195,393 |
| Hydro | 87 | 53 | 234,639 | 234,735 | 249,415 | 248,835 | 10,956 | 4,422 | 0 | (13,675) | 18,726 | 269,264 | 184,138 | $(29.885)$ | 239,380 |
| Kansas | 131 | 54 | 37,802 | 37,409 | 41,630 | 41,263 | 4,266 | 1,086 | 0 | $(7,156)$ | 3.027 | 42,486 | 29,224 | $(4,494)$ | 37,992 |
| Kingston | 110 | 55 | 315,601 | 312,086 | 353,746 | 350,528 | 28,601 | 13,123 | 0 | $(30,458)$ | 26,712 | 388,506 | 267,707 | $(40,487)$ | 348,020 |
| Krebs \& Krebs Usility Auth. | . 134 | 56 | 117,883 | 116,306 | 136,435 | 135,088 | 14,393 | 5,246 | 0 | (6,943) | 10,608 | 158,392 | 110,468 | $(14,784)$ | 143,609 |
| Laverne | 102 | 57 | 671,147 | 671,181 | 711.373 | 710,083 | 32,904 | 14.853 | 0 | $(56,505)$ | 52,928 | 754,263 | 513,445 | $(86,784)$ | 667,479 |
| Lindsay | 42 | 58 | 3,507,763 | 3,500,245 | 3,383,811 | 3,369,445 | 111,241 | 43,437 | 0 | (125,490) | 253,803 | 3,652,436 | 2,500,586 | $(401,674)$ | 3,250,762 |
| Madill | 51 | 59 | 1,387,700 | 1,384,752 | 1,494,860 | 1,489,675 | 61,523 | 42,635 | 0 | $(52,247)$ | 113,672 | 1,655,269 | 1,137,030 | (177.120) | 1,478,139 |
| Mannford | 97 | 60 | 1,671,524 | 1,666,796 | 1,798,776 | 1,792,743 | 114.867 | 39,897 | 0 | $(144,219)$ | 134,851 | 1,938,139 | 1,327,583 | $(212,281)$ | 1,725,858 |
| Marietta | 82 | 61 | 698,909 | 704,496 | 719,560 | 722,018 | 0 | 24,862 | 0 | $(59,642)$ | 52,847 | 740,085 | 499,122 | $(91.226)$ | 648,859 |
| Marietta PWA | 88 | 62 | 463,958 | 464,268 | 484,101 | 483,305 | 21,802 | 7,465 | 0 | $(66,286)$ | 34,860 | 481,145 | 323,102 | (61,112) | 420,033 |
| Mcloud | 113 | 63 | 237,184 | 235,463 | 263,417 | 261,671 | 16.646 | 7,080 | 0 | $(14,127)$ | 19,985 | 291,256 | 201,404 | (29,432) | 261,825 |
| Meaford ${ }^{\text {+ }}$ | 17 | 64 | 1,180,623 | 1,176,432 | 1,308,093 | 1,302,766 | 77,878 | 13,286 | 0 | (47,737) | 99,336 | 1,445,528 | 994,313 | (152,921) | 1,292,607 |
| Meeker | 108 | 65 | 305,158 | 304,544 | 330,652 | 329,750 | 13,949 | 7,311 | 0 | $(14,184)$ | 24,997 | 361,823 | 248,500 | (38,773) | 323,050 |
| Mooreland | 19 | 66 | 807,981 | 806,708 | 879,181 | 876,438 | 25,449 | 7,017 | 0 | (15.568) | 66,367 | 959,703 | 657,466 | $(104,998)$ | 854,705 |
| Mountain Park MCD | 81 | 67 | 493,810 | 491,280 | 547,375 | 544.578 | 16,523 | 8,375 | 0 | $(4,020)$ | 41,626 | 607,081 | 417,662 | $(64,121)$ | 542,960 |
| Muldrow | 112 | 68 | 779,319 | 771,823 | 890,265 | 882,903 | 41,419 | 26,778 | 0 | (26,485) | 67,782 | 992,397 | 687,232 | $(98,995)$ | 893,401 |
| Mustang | 72 | 69 | 2,196,037 | 2,183,142 | 2,539,728 | 2,527,907 | 198,647 | 83,832 | 0 | (63,522) | 197,804 | 2,944,668 | 2,046,660 | $(284,010)$ | 2,660,658 |
| Newkirk | 41 | 70 | 1,214,626 | 1,214,595 | 1,285,406 | 1,282.754 | 44,742 | 22.917 | 0 | $(90,359)$ | 95,355 | 1,355,409 | 922,565 | (156,075) | 1,199,335 |

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

| City | Cityno | Market Value of Assets as of 1/1/07 |  | Actuarial Value of Assets as of $1 / 1 / 07$ | Market Value of Assets as of $1 / 1 / 08$ | Actuarial Value of Assets as of $1 / 1 / 08$ | Contributions |  |  | Distributions | Assumed Yield at Valuation Rate (7.5\%) | Preliminary Actuarial Value | Market Value of Assets as of $1 / 1 / 08$ | Market Value Adjustment | Actuarial Value of Assets as of $1 / 1 / 08$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Employer |  |  | Employee | Buybacks |  |  |  |  |  |  |
| Nichols Hills ${ }^{+}$ | 66 | 71 | 4,735,698 |  | 4,757,076 | 5,243,709 | 5.252,779 | 249,315 | 124,657 | 0 | $(185,009)$ | 401,045 | 5,842,787 | 3,991,092 | (654.367) | 5,188,420 |
| Noble | 96 | 72 | 723.454 | 726,345 | 794,947 | 796,243 | 41,643 | 17,052 | 0 | $(57,787)$ | 59,752 | 856,903 | 583,571 | (98,261) | 758,642 |
| Nowata | 37 | 73 | 1,122,870 | 1,124,965 | 1,195,904 | 1,195,641 | 41,049 | 42,208 | 0 | (71,057) | 90,131 | 1,297,971 | 886,471 | (145.559) | 1,152,412 |
| Oilton | 83 | 74 | 195.311 | 194,601 | 212,122 | 211,197 | 12,691 | 7,399 | 0 | (19,079) | 15,878 | 228,085 | 155,338 | $(26,147)$ | 201,939 |
| Okeene | 76 | 75 | 504,961 | 506,308 | 539,848 | 539,802 | 8,046 | 7,944 | 0 | (19,018) | 40,372 | 577,146 | 392,717 | $(66,614)$ | 510,532 |
| Okemah | 116 | 76 | 356,030 | 352,859 | 406,552 | 403,419 | 15,637 | 11,234 | 0 | $(14,008)$ | 30,739 | 447,021 | 308,246 | $(46,302)$ | 400,719 |
| Oxla Municipal League | 20 | 77 | 4,507,771 | 4,488,997 | 4,532,098 | 4,494,157 | 73,42.1 | 0 | 0 | (55,729) | 337,725 | 4,849,574 | 3,330,300 | $(520,183)$ | 4,329,391 |
| Okmulgee | 21 | 78 | 10,048,078 | 10,039,073 | 10,617,166 | 10,585,238 | 88,801 | 0 | 0 | (274,557) | 786,927 | 11,186,408 | 7,612,719 | (1,289,873) | 9,896,535 |
| OMRE | 162 | 79 | 56,640 | 55,846 | 102,169 | 101,972 | 28,046 | 16,852 | 0 | 0 | 9,332 | 156.202 | 113,133 | (10,767) | 145,435 |
| Owasso | 49 | 80 | 6,052,279 | 5,998,573 | 6,861,249 | 6,809,993 | 359,183 | 211,990 | 0 | (202,704) | 524.567 | 7,703,029 | 5,331,649 | $(771,885)$ | 6,931,144 |
| Pawnee | 89 | 81 | 1,253,341 | 1,252,034 | 1,361,768 | 1,358,100 | 33,249 | 36,091 | 0 | $(48,299)$ | 102,647 | 1,481,788 | 1.014,344 | $(163,141)$ | 1,318,647 |
| Perkins | 94 | 82 | 537,368 | 534,550 | 605,445 | 602,383 | 45,951 | 19,286 | 0 | (57.408) | 45,472 | 655,684 | 448,531 | $(72,594)$ | 583,090 |
| Perry | 22 | 83 | 2,515,175 | 2,519,071 | 2,651,179 | 2,645,681 | 60,851 | 60,178 | 0 | (244,917) | 193.780 | 2,715,573 | 1,850,252 | $(310,246)$ | 2,405,328 |
| Pond Creek | 93 | 84 | 399,406 | 399,397 | 417,599 | 416,593 | 30,512 | 7,067 | 0 | $(36,684)$ | 31,278 | 448,767 | 307,090 | $(49,550)$ | 399.216 |
| Porum | 167 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poteau | 23 | 86 | 3,750,092 | 3,744,558 | 4,036,199 | 4,023,656 | 151,834 | 64,570 | 0 | $(242,793)$ | 300,785 | 4,298,051 | 2,933,484 | $(484,522)$ | 3,813,529 |
| Ratiff City | 163 | 87 | 7,830 | 7,723 | 15,356 | 15,319 | 5.113 | 1,651 | 0 | 0 | 1,403 | 23,485 | 16,939 | $(1,637)$ | 21,848 |
| Ringling | 105 | 88 | 125,436 | 124,905 | 137,605 | 136,931 | 3,081 | 2,487 | 0 | $(16,091)$ | 9,875 | 136,283 | 89.713 | $(19,657)$ | 116,626 |
| Roland | 157 | 89 | 194,762 | 189,646 | 254,601 | 250,521 | 35,622 | 14,788 | 0 | $(15,835)$ | 20,086 | 305,182 | 214,847 | $(25,880)$ | 279,301 |
| Sallisaw | 78 | 90 | 8,133.298 | 8,081,163 | 8,931,727 | 8.873,995 | 421,804 | 180,774 | 0 | $(451,397)$ | 671,219 | 9,696,395 | 6,665,900 | (1,030,725) | 8,665,670 |
| Seiling | 25 | 91 | 586,992 | 584,666 | 625,667 | 622,161 | 16,646 | 11,805 | 0 | $(38,199)$ | 46,297 | 658,710 | 449,246 | $(74,691)$ | 584,019 |
| Shawnes * | 27 | 92 | 24,785,640 | 24,804,637 | 26,496,140 | 26,440,808 | 1,053,468 | 0 | 0 | $(1,011,101)$ | 1,984,649 | 28,467,825 | 19,447,275 | ( $3,186,367$ ) | 25,281,457 |
| Spencer* | 91 | 93 | 813,051 | 815,011 | 852,307 | 851,795 | 26,282 | 16,045 | 0 | (85,632) | 62,261 | 870,750 | 588,981 | $(105,075)$ | 765,675 |
| Spiro | 107 | 94 | 657,286 | 652,615 | 717.422 | 712,435 | 27,379 | 13,791 | 0 | $(34,166)$ | 53,695 | 773,135 | 530,942 | $(82,910)$ | 690,224 |
| Stilwell | 119 | 95 | 2,573,373 | 2,537,172 | 2,986,586 | 2,956,064 | 239,943 | 89,865 | 0 | (139,246) | 228,776 | 3,374,401 | 2,344,273 | $(326,847)$ | 3.047,554 |
| Stratford | 124 | 96 | 92,321 | 90,498 | 104,437 | 102,805 | 0 | 3,918 | 0 | (815) | 7,827 | 113,735 | 78,874 | $(11,199)$ | 102,536 |
| Stroud | 79 | 97 | 2,371,278 | 2,372,187 | 2,477,833 | 2,475,867 | 47,231 | 45,101 | 0 | ( 182,617$)$ | 182,304 | 2,567,886 | $1.739,286$ | (306,814) | 2,261,072 |
| Sulphur | 52 | 98 | 2,218,464 | 2,205,741 | 2,431,419 | 2,417,297 | 75,323 | 37,803 | 0 | (60,325) | 183,277 | 2,653,375 | 1,824,147 | $(281,983)$ | 2,371,392 |
| Tallinina \& TPWA | 141 | 99 | 204,257 | 197,032 | 247,516 | 241,471 | 23,172 | 6.589 | 0 | (14,241) | 18,692 | 275,683 | 193.933 | $(23,569)$ | 252,113 |
| Thomas | 86 | 100 | 685,952 | 679,654 | 747,538 | 741,065 | 23,051 | 9,789 | 0 | $(25,239)$ | 55,865 | 804.531 | 553,528 | $(84,944)$ | 719,587 |
| Tipton | 136 | 101 | 50,369 | 48,914 | 59,251 | 57,953 | 5,303 | 1,523 | 0 | 0 | 4,602 | 69,382 | 49.010 | $(5,668)$ | 63,713 |
| Tishomingo | 159 | 102 | 84,662 | 82,743 | 114,683 | 113,363 | 30,649 | 8,431 | 0 | (21,852) | 9,148 | 139,740 | 98,861 | $(11,220)$ | 128,520 |
| Tonkawa | 30 | 103 | 1,911,777 | 1,910,756 | 2,033,547 | 2,027,771 | 58,264 | 24,001 | 0 | (105,110) | 151,226 | 2,156,153 | 1,470,728 | $(244,206)$ | 1,911,946 |
| Velma | 115 | 104 | 109,021 | 107,545 | 132,835 | 131,620 | 9,288 | 4,098 | 0 | (3,027) | 10,260 | 152,239 | 105,600 | $(14,959)$ | 137,280 |
| Vian | 133 | 105 | 78,544 | 77,191 | 85.699 | 84,398 | 8,210 | 4,064 | 0 | $(18,862)$ | 6,083 | 83,893 | 56,771 | $(10,091)$ | 73,802 |

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

| Cly | Cityno | Market Value of Assets as of 1/1/07 |  | Actuarial Value of Assets | Market Value of Assets | Actuarial Value of Assets | Contributions |  |  | Distributions | Assumed Yield at Valuation Rate ( $7.5 \%$ ) | Preliminary Actuarial Value | Market Value of Assets as of 1/1/08 | Market Value Adjustment | Actuarial Value of Assets as of 1/1/08 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | as of $1 / 1 / 107$ | as of $1 / 1 / 1 / 08$ | as of 1/1108 | Employer | Employes | Buybacks |  |  |  |  |  |  |
| Vinita | 31 | 106 | 5,061,910 | 6,042,364 | 5,499,366 | 5,474,450 | 225,004 | 85,198 | 0 | (233,362) | 413,465 | 5,964.754 | 4,089,704 | $(648,139)$ | 5,316,615 |
| Wakita | 121 | 107 | 103,096 | 101,423 | 119,793 | 118,324 | 5,925 | 1,600 | 0 | 0 | 9,156 | 135,005 | 93,957 | $(12,861)$ | 122,144 |
| Wart Actes | 54 | 108 | 4,287,753 | 4,291,945 | 4,478,978 | 4,471,800 | 69,613 | 17,907 | 0 | ( 216,367 ) | 330,553 | 4,673,506 | 3,171,988 | ( 549,922 ) | 4,123,584 |
| Watonga | 33 | 109 | 3,341,258 | 3,347,421 | 3,535,829 | 3,532,610 | 101,219 | 32,780 | 0 | (272,451) | 259,754 | 3,653,912 | 2,476,076 | $(435,013)$ | 3,218,899 |
| Waukomis | 35 | 110 | 372,189 | 370,718 | 286,342 | 277,818 | 3,326 | 7,511 | 0 | $(30,498)$ | 20,099 | 278,257 | 194.746 | $(25,087)$ | 253,169 |
| Waurika | 69 | 111 | 671,853 | 670,303 | 696,248 | 693,413 | 12,620 | 6,736 | 0 | $(36,510)$ | 51,363 | 727,621 | 495,720 | (83,185) | 644,436 |
| Weatherford | 65 | 112 | 572,279 | 572,279 | 562,287 | 562,287 | 97,828 | 50.551 | 0 | $(44,740)$ | 46,058 | 711,984 | 510,459 | $(50,381)$ | 661,603 |
| Webbers Falls | 142 | 113 | 56,505 | 54,438 | 68,847 | 67,096 | 8,533 | 3,556 | 0 | $(8,207)$ | 5,178 | 76,156 | 53,985 | $(5,975)$ | 70,181 |
| Wellston | 106 | 114 | 281,005 | 279,753 | 310,018 | 308,497 | 15.082 | 7,364 | 0 | (22,544) | 23,134 | 331,533 | 226,908 | $(36,552)$ | 294,981 |
| Westvile Utility Authority | 100 | 115 | 117,978 | 117,277 | 141,837 | 141,291 | 13,924 | 12,455 | 0 | (10,654) | 11.187 | 168,202 | 117,846 | $(15,002)$ | 153,200 |
| Wetumka | 92 | 116 | 820,064 | 813,912 | 888,494 | 881,042 | 74,935 | 15.737 | 0 | $(93,653)$ | 65,966 | 944,026 | 650,474 | $(98,410)$ | 845,616 |
| Yale | 71 | 117 | 1,211,348 | 1,207,954 | 1.271,855 | 1,266,057 | 7,165 | 7,196 | 0 | (42,673) | 93,893 | 1,331,637 | 906,749 | $(152,863)$ | 1.178,774 |
| Yukon | 57 | 118 | 10,344,957 | 10,310,610 | 11,536,040 | 11,494,372 | 1,023.117 | 0 | 0 | (647,409) | 876,167 | 12,746,246 | 8,766,044 | $(1,350,389)$ | 11,395,857 |
| Bartesville ** | 1445 |  | 19,938 | 19,938 | 64,407 | 64,407 | 0 | 0 | 0 | $(48,772)$ | 3,002 | 18,636 | 95,700 | 77,064 | 95.700 |
| Mannford ** | 1446 |  | 17,382 | 17,382 | 22,406 | 22,406 | 0 | 0 | 0 | 0 | 1,680 | 24,086 | 18,873 | $(5,213)$ | 18,873 |
| Chouteau* | 58 | 119 | 25,518 | 25,518 | 25,112 | 25,112 | 0 | 0 | 0 | (2,336) | 1,796 | 24,572 | 16.447 | (8.126) | 16,447 |
| Comanche * | 6 | 120 | 53,346 | 53,346 | 56,454 | 56,454 | 0 | 0 | 0 | $(17,609)$ | 3.574 | 42,418 | 47,463 | 5,045 | 47,463 |
| Fairfax* | 39 | 121 | 196,928 | 196,928 | 204,832 | 204,832 | 0 | 0 | 0 | $(7,276)$ | 15,090 | 212,645 | 143,791 | (68,855) | 143,791 |
| Fairvew* | 59 | 122 | 501,874 | 501,874 | 522,123 | 522,123 | 0 | 0 | 0 | $(18,951)$ | 38,449 | 541,621 | 366,181 | (175,440) | 366,181 |
| Muskogee * | 47 | 123 | 68.100 | 68,100 | 67,913 | 67,913 | 0 | 0 | 0 | (15,489) | 4.513 | 56,937 | 48,300 | $(8.637)$ | 48,300 |
| Norman * | 130 | 124 | 1,048,354 | 1,048,354 | 973,147 | 973,147 | 0 | 0 | 0 | (134,576) | 67,939 | 906,511 | 601,476 | $(305,035)$ | 601,476 |
| Prague* | 68 | 125 | 50,261 | 50,261 | 50,144 | 50,144 | 0 | 0 | 0 | $(2,297)$ | 3,675 | 51,522 | 34,899 | $(16,623)$ | 34,899 |
| Skiatook* | 28 | 126 | 229,956 | 229,956 | 229,139 | 229,139 | 0 | 0 | 0 | $(18,843)$ | 16,479 | 226,775 | 152,075 | (74,700) | 152,075 |
| Stilwater* | 29 | 127 | 5,226,457 | 5,226,457 | 5,593,591 | 5,593,591 | 0 | 0 | 0 | $(23,109)$ | 418,653 | 5,989,135 | 4,070,506 | $(1,918,629)$ | 4,070,506 |
| Stillwater Hospital * | 56 | 128 | 588.787 | 588,787 | 615,818 | 615,818 | 0 | 0 | 0 | $(18,438)$ | 45,495 | 642,875 | 435,135 | (207,740) | 435,135 |
| Tecumseh* | 43 | 129 | 185.237 | 185.237 | 188,269 | 188.269 | 0 | 0 | 0 | (11.135) | 13,703 | 190,836 | 128.522 | (62,314) | 128,522 |
| Total |  |  | 285,961,578 | 285,283,518 | 308,162,861 | 307,029,614 | 13,058,082 | 3,755,464 | 0 | $(14,582,140)$ | 23,110,899 | 332,371,917 | 227,677,738 | $(38,250,415)$ | 294,121,502 |

## Nonactive only city, the Actuarial Value of Assets is equal to the Market Value

* Retree medical plan; the Actuarial Value of Assets is equal to the Market Value.
+ Hyorid city, employee account balances are subtracted from the Actuarial Value of Assets to determine the Valuation Assets


## E

Summary of Plan Provisions and Actuarial Method and Assumptions

## E Summary of Plan Provisions and Actuarial Method and Assumptions

This section outlines the plan provisions and actuarial method and assumptions used in the valuation.

The first exhibit outlines the provisions of the OMRF Master Plan.
The following exhibits outline the two actuarial methods used to value plan obligations: the entry age normal cost method and the unit credit cost method. See Section D for a description of the actuarial methods used to value assets.

The final exhibit in this section presents the actuarial assumptions. Actuarial assumptions were revised this year based on a detailed analysis of the demographic experience of OMRF member cities. Specifically, turnover rates, salary increase rates, and retirement rates were changed.

See Section H for a summary of plan provisions and the actuarial method and assumptions used in the valuation for the City of Bartlesville.

## Oklahoma Municipal Retirement Fund

## Summary of Plan Provisions

| Eligibility | All regular, full-time employees of a participating employer except <br> police, firefighters and other employees covered under a state system. <br> Cities may elect to cover part-time employees. |
| :--- | :--- |
| Probationary period | Participation may begin immediately, or may commence after <br> completion of a probationary period, as specified in the adoption <br> agreement. |
| Service |  |
| Credited service | The last period of continuous employment with the employer excluding <br> any periods before the effective date of the plan specified in the <br> adoption agreement. Cities may elect to limit the maximum service <br> credited. Employees of Collinsville may receive additional credit for <br> unused sick leave. |
|  | Credited service plus transferred service from other OMRF employers. |

## Accrued Benefit

The percentage of final average compensation specified in the adoption agreement, multiplied by the number of years of credited service. The percentages that may be elected are:

| - Plan AAA | $3.000 \%$ |
| :--- | :--- |
| - Plan AA | $2.625 \%$ |
| - Plan BB | $2.250 \%$ |
| - Plan CC | $1.875 \%$ |
| - Plan A | $1.500 \%$ |
| - Plan B | $1.125 \%$ |
| - Plan C | $0.750 \%$ |

## Oklahoma Municipal Retirement Fund <br> Summary of Plan Provisions

## Normal Retirement Age

## Normal Retirement

Eligibility
Benefit

Early Retirement
Eligibility
Benefit

Disability Retirement
Eligibility
Benefit

Termination of Service
Before vesting
After vesting

Age 65 with service requirement fulfilled.
If specified in the adoption agreement, normal retirement age for an employee with 30 years of vesting service may be as early as age 62.
Also if specified in the adoption agreement, normal retirement age may be as early as 55 when the sum of an employee's age in years and number of years of credited service equals 80 or more, as provided under the Rule of 80 alternative.
Four cities have adopted special retirement provisions not provided in the standard adoption agreements:

- For employees of Cushing, normal retirement age is 60 with 10 years of service.
- Normal retirement age for an employee of Altus with 25 years of vesting service may be as early as age 62.
- For an employee of Warr Acres normal retirement age may be as early as 55 when the sum of an employee's age in years and number of years of credited service equals 75 or more.
- For employees of Del City, normal retirement age is 60 with 7 years of service, or as early as age 55 with 20 years of vesting service.

Termination of employment on or after normal retirement age.
The accrued benefit payable immediately.

Termination after age 55 with service requirement fulfilled.
The accrued benefit payable starting at normal retirement age, or an actuarially reduced benefit stating at early retirement age.

Total and permanent disability.
The accrued benefit is payable upon disablement without reduction for early payment.

Return of member contributions with interest.
The accrued benefit payable starting at normal retirement age, or an actuarially reduced benefit starting at early retirement age.

## Oklahoma Municipal Retirement Fund

## Summary of Plan Provisions

## In-service Death

Before vesting
After vesting (married participants only)

After vesting (other participants)

## Payment Options

 Normal formOptional forms

## Cost of Living Option

## Hybrid Option

Return of member contributions with interest.
$50 \%$ of the accrued benefit is payable to the spouse until death or remarriage. For employees of Bethany, this benefit is payable for life with 10 years certain.
$50 \%$ of the accrued benefit is payable to the designated beneficiary for 60 or 120 months, as specified in the adoption agreement.

The normal form of payment of the accrued benefit is a monthly lifetime annuity with 5 or 10 years certain, as specified in the adoption agreement.

Other annuity forms available on an actuarial equivalent basis are:

- Joint and 50\% survivor annuity
- Joint and 66-2/3rds last survivor annuity (no longer allowed for employees of Chickasha)
- Joint and 100\% survivor annuity
- If specified in the adoption agreement (with or without restrictions), a single lump sum payment

If specified in the adoption agreement, benefits in payment status are adjusted each July 1st based on the percentage change in the CPI. The maximum increase in any year is $3 \%$. For employees of Skiatook, the increase is $3 \%$ per year, regardless of the change in CPI .

If specified in the adoption agreement, any employee contributions designated as hybrid contributions are accumulated at the actual rate earned by the retirement fund and paid to the employee upon retirement in addition to the formula amount.

## Oklahoma Municipal Retirement Fund

## SUMMARY OF THE ACTUARIAL COST METHOD

## (Entry Age Normal)

Pension funding requirements are allocated to periods of time using the entry age normal cost method.

Under the entry age normal cost method, the normal cost is computed as the level percent of pay which, if paid from the time an employee became a participant until his assumed retirement, would accumulate to a fund sufficient to pay all plan benefits.

The actuarial liability of the plan is the hypothetical accumulation with interest of prior normal costs less payments, from the employee's date of participation to present.

The actuarial liability for non-active partipants is the present value of future benefits anticipated to be paid to current retirees, beneficiaries and deferred vested participants, discounted for interest and mortality.

The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of plan assets. If greater than zero, this amount (redetermined each year) is amortized over 30 years from the valuation date; otherwise, it is amortized as a level percent of pay over the future working lifetime of active participants.

Experience gains (decreases in cost due to favorable experience), or experience losses (increases in cost due to adverse experience), attributable to deviations between the assumed and actual experience of the Plan, are amortized as part of the UAL.

## Oklahoma Municipal Retirement Fund

## SUMMARY OF THE ACTUARIAL COST METHOD

## (Unit Credit)

Pension funding requirements are allocated to periods of time using the unit credit cost method.

Under the unit credit cost method, the normal cost is computed as the present value of the increase in accrued retirement income for each employee's service during the following year.

The actuarial liability of the plan is the present value of the accrued retirement income earned to date. Present values are discounted for interest, mortality, turnover, and retirement rates by age.

The actuarial liability for non-active partipants is the present value of future benefits anticipated to be paid to current retirees, beneficiaries and deferred vested participants, discounted for interest and mortality.

The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of plan assets. This amount (redetermined each year) is amortized over 30 years from the first valuation date after joining OMRF.

Experience gains (decreases in cost due to favorable experience), or experience losses (increases in cost due to adverse experience), attributable to deviations between the assumed and actual experience of the Plan, are amortized as part of the UAL.

## SUMMARY OF ACTUARIAL ASSUMPTIONS



## F

Summary of

## Plan Participants

## F Summary of Plan Participants

The first three exhibits in this section depict the age and service distribution, along with average valuation pay, for active participants as of January 1, 2009 (OMRF Master Trust in total). The City of Bartlesville is included in the count although it has not adopted the OMRF master plan but has a career average benefit formula. Similar exhibits in the individual municipalities' actuarial reports show the distribution for each member plan with active participants.

The fourth and fifth exhibits in this section depict the age distribution and average benefit for each category of nonactive participant as of January 1, 2009 (OMRF Master Trust in total). Again, participants in the City of Bartlesville plan are included. Similar exhibits in the municipalities' actuarial reports show the distribution for each member plan with nonactive participants.

Participants in retiree medical plans are not separately identified.

Distribution of Active Employees by Age


Distribution of Active Employees by Service


AGE AND SERVICE OF ACTIVE PARTICIPANTS
January 1, 2009

Years of Service

| Age | Gro | up | 0.4 |  | 5.9 |  |  |  | 15.19 |  | 20-24 |  | 25,29 |  | 30-49 |  | All Service |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count | Ave Pay | count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay |
| 15 | - | 19 | 10 | 8,004 |  |  |  |  |  |  |  |  |  |  |  |  | 10 | 8,004 |
| 20 |  | 24 | 225 | 17,017 | 4 | 27,423 |  |  |  |  |  |  |  |  |  |  | 229 | 17,199 |
| 25 | $\cdots$ | 29 | 262 | 19,589 | 52 | 31,889 | 1 | 32,392 |  |  |  |  |  |  |  |  | 315 | 21,660 |
| 30 |  | 34 | 215 | 20,472 | 87 | 33,455 | 20 | 35,976 | 1 | 35,366 |  |  |  |  |  |  | 323 | 24,975 |
| 35 | - | 39 | 234 | 22,813 | 96 | 35,049 | 49 | 33,095 | 24 | 42,098 |  |  |  |  |  |  | 403 | 28,127 |
| 40 | - | 44 | 217 | 24,949 | 124 | 32,249 | 70 | 34,022 | 49 | 40,140 | 24 | 40,409 | 3 | 30,533 |  |  | 487 | 30,436 |
| 45 | - | 49 | 240 | 25,088 | 125 | 35,141 | 87 | 34,610 | 66 | 40,506 | 57 | 40,446 | 45 | 37,207 | 2 | 52,790 | 622 | 32,449 |
| 50 | - | 54 | 224 | 23,733 | 140 | 33,267 | 69 | 33,830 | 81 | 37,706 | 71 | 37,646 | 43 | 41,588 | 21 | 38,308 | 649 | 31,784 |
| 55 | - | 59 | 138 | 25,536 | 99 | 32,622 | 69 | 35,581 | 51 | 36,735 | 71 | 44,711 | 35 | 40,862 | 24 | 41,968 | 487 | 34,279 |
| 60 | - | 64 | 60 | 27,478 | 42 | 33,230 | 49 | 34,576 | 43 | 40,373 | 33 | 39,454 | 18 | 35,968 | 17 | 40,074 | 262 | 34,753 |
| 65 | - | 69 | 24 | 27,480 | 27 | 30,273 | 11 | 34,073 | 7 | 32,247 | 5 | 38,672 | 6 | 54,108 | 7 | 25,496 | 87 | 31,884 |
| $\begin{gathered} 70 \\ 110 \end{gathered}$ |  |  | 9 | 22,753 | 9 | 32,430 | 4 | 23,319 | 9 | 25,162 | 2 | 40,840 | 4 | 22,184 | 4 | 37,793 | 41 | 27,756 |
| All Ages |  |  | 1,858 |  | 805 |  | 429 |  | 331 |  | 263 |  | 154 |  | 75 |  | 3,915 |  |

Age is in completed years (age last birthday) on the census date.
Service is completed years of benefit service on the census date.
Pay is the total pay for 2008

Distribution of Nonactive Participants by Age



## G

## Sample

Actuarial Report

## G Sample Actuarial Report

This section contains a copy of the 2009 Actuarial Valuation of Funding Requirements for the Employee Retirement System of Warr Acres, Oklahoma. It is included as a sample of the valuation reports sent to member employers. Warr Acres is an example of a retirement system that is required to provide additional disclosures under GASB 50, and has additional pages ( 5 A and 5 B ) not found in most reports.

# Oklahoma Municipal Retirement Fund Employee Retirement System of Warr Acres, Oklahoma <br> <br> ACTUARIAL VALUATION OF FUNDING REQUIREMENTS 

 <br> <br> ACTUARIAL VALUATION OF FUNDING REQUIREMENTS}

Effective for the Year Starting
July 1, 2009

March, 2009

Prepared by
Dean Actuafies, llec 5646 MILTON STREET, SUITE 210

Dallas, TX 75206
(214)891.0990

## INTRODUCTION

This report presents the results of an actuarial valuation of the Employee Retirement System of Warr Acres, Oklahoma.

The purposes of the valuation are:

- to determine the required contribution for the retirement program effective July 1, 2009.
- to illustrate the increase in contributions that would be necessary to support the next benefit level under the OMRF program, if available.
- to provide accounting information required by GASB 50 (funding progress).
The first purpose of the report is to set the plan contribution level for the next year. Exhibit 1 summarizes the required contribution level for the plan at its current level and at the next benefit level, if available.
The total contribution rate for the plan is separated between the employeepaid and municipality-paid portions based on the most recent employee contribution rate.

The employee contribution rate is set by the plan, and the municipality is committed to meet the long term funding needs of the plan by paying any portion of the contribution not provided by employees.

Exhibit 2 shows the detailed development of the contribution requirements for the year.

Exhibit 3 compares plan liability for benefits actually accrued to funding liability, and shows the plan's funded status under these two measures.

The actuarial value of assets (Exhibit 4) is related to market value, but smoothed to reduce the volatility of contribution requirements. The method for determining the actuarial asset value was changed from prior years by increasing the corridor from $20 \%$ to $30 \%$.

GASB Statement 50 requires the employer to record in its annual audit report the progress towards funding the retirement program (see Exhibit 5).

The remainder of the report summarizes the plan provisions, participant data and actuarial valuation assumptions.

Actuarial assumptions were revised this year based on a detailed analysis of the demographic experience of OMRF member cities. Specifically, turnover rates, salary increase rates, and retirement rates were changed. See Exhibit 8 for a description of the new assumptions.

## Oklahoma Municipal Retirement System Employee Retirement System of Warr Acres, Oklahoma

## SUMMARY OF 2009-2010 PLAN CONTRIBUTION RATES

|  | Current Plan | Next <br> Plan Level |  |
| :---: | :---: | :---: | :---: |
|  | AA | AAA | Increase |
| Employee contribution rate as a percent of pay | 2.13\% | 2.13\% | 0.00\% |
| Municipality-required contribution rate as a percent of participant payroll | 16.84\% | 21.61\% | 4.77\% |
| Total required contribution rate | 18.97\% | 23.74\% | 4.77\% |

Notes:
The required contribution rate is actuarially measured each plan year as the amount necessary to fund the plan on a long term basis using the actuarial cost methods and assumptions adopted for the plan:

| Cost Method | Entry age normal |
| :--- | :--- |
| Interest rate | $7.5 \%$ per annum |
| Pay Increases | Rates by age |
| Mortality | UP 94 mortality (projected) |
| Retirement age | Rates by age |
| Turnover | Rates by age and service |
| Asset value | Actuarial method |

The total required contribution rate for the prior year (2008-2009) was $13.63 \%$ of participant payroll. The required contribution rate changes each year, reflecting the actual contributions, the investment gains and losses during the prior year, and the demographic experience of the participant group.

Since the employee contribution rate is fixed by the terms of the plan, the municipalityrequired contribution rate is the amount necessary to bring the total contribution rate to at least the total required contribution rate.

The employee contribution rate is a plan provision and typically increases as the plan's benefit level increases. For this illustration, the employee contribution rate is assumed to remain constant in going from the current plan level to the next plan level.

## Oklahoma Municipal Retirement Fund Employee Retirement System of Warr Acres, Oklahoma <br> Development of Plan Contribution Requirement

|  | Current Plan |  | n Level |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA |  | AAA |  | crease |
| Actuarial liability (entry age normal method) Retired, survivors and deferred vested (23) Active employees (31) | $\begin{array}{r} 2,382,505 \\ 2,951,273 \\ \hline \end{array}$ | \$ | $\begin{aligned} & 2,382,505 \\ & 3,372,883 \\ & \hline \end{aligned}$ | \$ | $\begin{array}{r} 0 \\ 421,610 \\ \hline \end{array}$ |
| Total | \$ 5,333,778 | \$ | 5,755,389 |  |  |
| Assets (actuarial value as of 1-1-2009) | 4,123,584 |  | 4,123,584 |  | 0 |
| Unfunded actuarial liability | \$ 1,210,194 | \$ | 1,631,804 | \$ | 421,610 |
| Annual amount to amortize the unfunded actuarial liability over 30 years | \$ 98,829 | \$ | 133,260 | \$ | 34,431 |
| Annual normal cost | 88,255 |  | 100,863 |  | 12,608 |
| Total annual cost | \$ 187,084 | \$ | 234,123 | \$ | 47,039 |
| Valuation payroll as of 1-1-2009 | \$ 986,150 | \$ | 986,150 |  |  |
| Required total contribution as a percent of payroll (effective 7-1-2009) | 18.97\% |  | 23.74\% |  | 4.77\% |
| Employee paid portion as a percent of payroll | 2.13\% |  | 2.13\% |  | 0.00\% |
| As a measure of the long term cost of the plan, the entry age normal cost as a \% of pay may be viewed as the value of benefits accruing under the plan; this figure could be used for long-term budgeting:$8.95 \% \quad 10.23 \% \quad 1.28 \%$ |  |  |  |  |  |

Notes
See Exhibit 4 for the development of the actuarial value of assets.
See Exhibits 8 and 9 for a description of the actuarial methods and assumptions used in the valuation.
See Exhibits 10 and 11 for a summary of the active participants and retirees.
The present value of benefits for non-active participants includes remaining balances of $\$ 33,265$ for 110 former employees not included in the deferred vested census.

Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA

## Oklahoma Municipal Retirement Fund <br> Employee Retirement System of Warr Acres, Oklahoma <br> Comparison of Plan Liabilities

Plan costs are developed to spread an active participant's cost over his expected working lifetime as a level percent of pay. As such, the funding liability under the entry age normal (EAN) cost method has an element of prefunding of future expected accruals.

Another key measure of plan liability, sometimes called the accumulated benefit obligation (ABO), is a measure of the benefits actually accrued under the plan to date. The ABO compared to the actual market value of assets gives an indication of how well a plan is able to satisfy all of its current obligations.

The plan's accrued liability funded status and the funding liability funded status as of 1-1-2009 is:

|  | Accrued Liability | Funding <br> Liability |
| :---: | :---: | :---: |
|  | ABO | EAN |
| Actuarial liability (entry age normal method) |  |  |
| Retired, survivors and deferred vested (23) | \$ 2,382,505 | \$ 2,382,505 |
| Active employees (31) | 1,928,799 | 2,951,273 |
| Total | \$ 4,311,304 | \$ 5,333,778 |
| Assets |  |  |
| Market value as of 1-1-2009 | 3,171,988 |  |
| Actuarial value as of 1-1-2009 |  | 4,123,584 |
| Funded status: assets over (under) liability | \$ (1,139,316) | \$ (1,210,194) |
| Funded ratio | 74\% | 77\% |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Warr Acres, Oklahoma

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

1 Market Value of Assets as of 1/1/08
2 Actuarial Value of Assets as of $1 / 1 / 08$
Percent of Market Value 100\%

## 3 Contributions

Employer $\quad 69,613$
Employee $\quad 17,907$
Buy backs 0
4 Distributions
5 Assumed Yield at Valuation Rate (7.50\%)
6 Preliminary Actuarial Value $\quad 4,673,506$
7 Market Value of Assets as of $1 / 1 / 09 \quad 3,171,988$

8 Adjustment
$25 \%$ of (7) minus (6)
9 Minimum Actuarial Value of Assets as of $1 / 1 / 09$ $70 \%$ of (7)

10 Maximum Actuarial Value of Assets as of 1/1/09 $130 \%$ of (7)

11 Actuarial Value of Assets as of 1/1/09
(6) plus (8), but not less than (9) nor more than (10)

12 AAV as percent of Market Value
$(216,367)$
330,553
\$4,478,978
$\$ 4,471,800$
$100 \%$
$(375,380)$
\$2,220,392
\$4,123,584
\$4,123,584

130\%

An actuarial technique is used to reduce the effect of fluctuations in market value on plan funding requirements.

The actuarial value of assets is equal to the prior year's value adjusted for cash flows and interest at the valuation rate. This amount is adjusted by a percentage of the difference between it and market.

The method for determining the actuarial asset value was changed from prior years by increasing the corridor from $20 \%$ to $30 \%$. If the actuarial asset value would otherwise be outside a $30 \%$ corridor, it is instead equal to the relevant corridor limit.

## Oklahoma Municipal Retirement Fund Employee Retirement System of Warr Acres, Oklahoma <br> SCHEDULE OF FUNDING PROGRESS

| Actuarial <br> Valuation Date | Value of Assets | Asset Valuation Basis | Actuarial <br> Accrued <br> Liability <br> (AAL) | Type | Unfunded AAL (UAAL) | Funded Ratio | Covered Payroll | UAAL as a Percentage of Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/1/2000 | 3,976,821 | Actuarial | 2,897,097 | EAN | $(1,079,724)$ | 137.3\% | 1,258,733 | -85.8\% |
| 1/1/2001 | 4,194,280 | Actuarial | 3,341,681 | EAN | $(852,599)$ | 125.5\% | 1,078,588 | -79.0\% |
| 1/1/2002 | 4,256,242 | Actuarial | 3,756,810 | EAN | $(499,432)$ | 113.3\% | 1,113,808 | -44.8\% |
| 1/1/2003 | 3,924,891 | Actuarial | 3,981,149 | EAN | 56,259 | 98.6\% | 999,470 | 5.6\% |
| 1/1/2004 | 4,015,751 | Actuarial | 4,284,433 | EAN | 268,682 | 93.7\% | 1,130,804 | 23.8\% |
| 1/1/2005 | 4,138,500 | Actuarial | 4,512,124 | EAN | 373,624 | 91.7\% | 1,215,230 | 30.7\% |
| 1/1/2006 | 4,262,947 | Actuarial | 4,620,337 | EAN | 357,391 | 92.3\% | 1,035,112 | 34.5\% |
| 1/1/2007 | 4,291,945 | Actuarial | 4,745,454 | EAN | 453,509 | 90.4\% | 919,291 | 49.3\% |
| 1/1/2008 | 4,471,800 | Actuarial | 5,014,551 | EAN | 542,751 | 89.2\% | 893,923 | 60.7\% |
| 1/1/2009 | 4,123,584 | Actuarial | 5,333,778 | EAN | 1,210,194 | 77.3\% | 986,150 | 122.7\% |

Covered payroll is the total annualized rate of pay as of the valuation date based on actual pay for the preceding year.

## Oklahoma Municipal Retirement Fund

## ADDITIONAL GASB 50 DISCLOSURE INFORMATION

GASB Statement 50 requires the disclosure of the Annual Pension Cost (APC) whenever it is different from the Annual Required Contribution (ARC) developed in the actuarial valuation. A difference between the APC and ARC occurs when the actual pension contribution made by the employer is materially different than the ARC, resulting in a Net Pension Obligation (NPO).

Exhibit 5B on the following page shows the development of the Annual Pension Cost for the fiscal year ending June 30, 2009. Because the plan is pay-related and required contributions are expressed as a percent of participant payroll, the APC is best expressed as a percentage of participant payroll.

The following entries appear in Exhibit 5B:
Annual Required Contribution (ARC) -- the percent of pay contribution developed in the annual actuarial report, converted to a dollar amount

Interest on NPO -- one year's interest (at the $7.50 \%$ valuation rate) on the prior year's NPO balance

ARC Adjustment -- an adjustment to avoid double counting; in developing the ARC, any shortfall in actual contributions versus prior years' ARCs is amortized over a rolling 30 -year period; thus the ARC already implicitly includes the prior year's NPO balance divided by an amortization factor of approximately 12.25

Pension Cost -- (Annual Required Contribution) plus (Interest on NPO) minus (ARC Adjustment)

Actual Contribution -- employer contributions actually deposited to the Trust during the fiscal year

Change in NPO -- (Pension Cost) minus (Actual Contribution)
End of Year NPO Balance -- the NPO Balance at the end of the prior year, plus the current year Change in NPO

Oklahoma Municipal Retirement Fund
Employee Retirement System of Warr Acres, Oklahoma

## ANNUAL PENSION COST AND NET PENSION OBLIGATION

| Fiscal <br> Year <br> End | Annual <br> Required <br> Contribution | Interest <br> on <br> NPO | ARC <br> Adjustment | Annual <br> Pension <br> Cost | Actual <br> Contribution | Change <br> in <br> NPO | End of <br> Year NPO <br> Balance |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2004$ | 85,321 | 0 | 0 | 85,321 | 15,869 | 69,452 | 69,452 |
| $6 / 30 / 2005$ | 102,305 | 5,209 | 5,672 | 101,842 | 54,129 | 47,713 | 117,165 |
| $6 / 30 / 2006$ | 104,380 | 8,787 | 9,568 | 103,599 | 51,879 | 51,720 | 168,885 |
| $6 / 30 / 2007$ | 89,053 | 12,666 | 13,792 | 87,928 | 47,118 | 40,810 | 209,695 |
| $6 / 30 / 2008$ | 116,400 | 15,727 | 17,125 | 115,003 | 64,139 | 50,864 | 260,558 |
| $6 / 30 / 2009$ | 102,781 | 19,542 | 21,278 | 101,045 |  |  |  |
|  |  |  |  |  |  |  |  |

Fiscal year end 6/30/09 Annual Pension Cost as \% of participant payroll:
11.30\%

## Oklahoma Municipal Retirement Fund Employee Retirement System of Warr Acres, Oklahoma <br> SUMMARY OF PLAN PROVISIONS

| Eligibility | All regular, full-time employees except police, firefighters and other employees who are covered under an approved system. |
| :---: | :---: |
| Probationary period | None. |
| Employee contributions | 2.13\% of pay. |
| Service Credited service | The last period of continuous employment with the employer excluding any periods before the plan effective date specified in the adoption agreement. |
| Vesting | Credited service plus transferred service from other OMRF employers. |
| Benefit Eligibility | 10 or more years of vesting service. |
| Final Average Compensation | The average of the 5 highest consecutive years of salaries out of the last 10 years of service. |
| Accrued Benefit | Plan AA <br> $2.625 \%$ of final average compensation multiplied by the number of years of credited service. |
| Normal Retirement Age | The earlier of: <br> Age 65 with 10 or more years of vesting service <br> Age 55 with 75 points and 10 or more years of vesting service Points are equal to age plus completed years of service |
| Normal Retirement Eligibility | Termination of employment on or after normal retirement age. |
| Benefit | The accrued benefit payable immediately. |
| Early Retirement Eligibility | Termination after age 55 with 10 or more years of vesting service. |
| Benefit | The accrued benefit payable starting at normal retirement age, or the accrued benefit reduced $5 \%$ per year for commencement prior to normal retirement age. |

## Oklahoma Municipal Retirement Fund Employee Retirement System of Warr Acres, Oklahoma

## SUMMARY OF PLAN PROVISIONS

## Disability Retirement

Eligibility
Benefit

Total and permanent disability after 10 or more years of service.
The accrued benefit is payable upon disablement without reduction for early payment

Termination Before
Retirement Age

Before vesting
After vesting
In-service Death
Before vesting
After vesting (married participants only)

After vesting (other participants)

Payment Options
Normal form

Optional forms

Cost of Living

Return of employee contributions with interest.
The accrued benefit payable starting at normal retierment age, or a reduced benefit payable at an early retirement age.

Return of member contributions with interest.
$50 \%$ of the accrued benefit is payable to the spouse until death or remarriage.
$50 \%$ of the accrued benefit is payable for 5 years certain.

The normal form of payment of the accrued benefit is a monthly lifetime annuity with 5 years certain.

Disability retirement benefits are paid only under the normal form.
Other retirement benefits are available under actuarially equivalent optional forms:

- Joint and 50\% survivor annuity
- Joint and 66-2/3rds\% last survivor annuity
- Joint and $100 \%$ survivor annuity
- Lump sum, with limitations

This plan has not elected the automatic post-retirement cost-ofliving adjustments.

## Oklahoma Municipal Retirement Fund

## ILLUSTRATION OF RETIREMENT INCOME BY PLAN LEVEL

(Annual retirement income for an employee working to age 65 under the normal form of annuity at various pay and income levels)

Pension as a percent of Final Average Pay per year of service

| C | B | A | CC | BB | AA | AAA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0.750 \%$ | $1.125 \%$ | $1.500 \%$ | $1.875 \%$ | $2.250 \%$ | $2.625 \%$ | $3.000 \%$ |

20 Years of Service at Retirement

| Final Average | Plan Level |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Pay Level | C | B | A | CC | BB | AA | AAA |  |
| 10,000 |  | $\$ 1,500$ | $\$ 2,250$ | $\$ 3,000$ | $\$ 3,750$ | $\$ 4,500$ | $\$ 5,250$ |  |
| 20,000 | 3,000 | 4,500 | 6,000 | 7,500 | 9,000 | 10,500 | 12,000 |  |
| 30,000 |  | 4,500 | 6,750 | 9,000 | 11,250 | 13,500 | 15,750 |  |
| 40,000 | 6,000 | 9,000 | 12,000 | 15,000 | 18,000 | 21,000 | 24,000 |  |
| 50,000 | 7,500 | 11,250 | 15,000 | 18,750 | 22,500 | 26,250 | 30,000 |  |

30 Years of Service at Retirement

| Final Average Pay Level | Plan Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | C | B | A | CC | BB | AA | AAA |
| 10,000 | \$2,250 | \$3,375 | \$4,500 | \$5,625 | \$6,750 | \$7,875 | \$9,000 |
| 20,000 | 4,500 | 6,750 | 9,000 | 11,250 | 13,500 | 15,750 | 18,000 |
| 30,000 | 6,750 | 10,125 | 13,500 | 16,875 | 20,250 | 23,625 | 27,000 |
| 40,000 | 9,000 | 13,500 | 18,000 | 22,500 | 27,000 | 31,500 | 36,000 |
| 50,000 | 11,250 | 16,875 | 22,500 | 28,125 | 33,750 | 39,375 | 45,000 |

40 Years of Service at Retirement

| Final Average | Plan Level |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | :--- | ---: | ---: | :---: |
| Pay Level | C | B | A | CC | BB | AA | AAA |  |
|  |  | $\$ 3,000$ | $\$ 4,500$ | $\$ 6,000$ | $\$ 7,500$ | $\$ 9,000$ | $\$ 10,500$ |  |
| 10,000 |  | $\$ 12,000$ |  |  |  |  |  |  |
| 20,000 | 6,000 | 9,000 | 12,000 | 15,000 | 18,000 | 21,000 | 24,000 |  |
| 30,000 | 9,000 | 13,500 | 18,000 | 22,500 | 27,000 | 31,500 | 36,000 |  |
| 40,000 | 12,000 | 18,000 | 24,000 | 30,000 | 36,000 | 42,000 | 48,000 |  |
| 50,000 | 15,000 | 22,500 | 30,000 | 37,500 | 45,000 | 52,500 | 60,000 |  |

Plan AAA is illustrated with no service limit. The master plan documents permits the plan sponsor to limit the years of service used in the AAA formula.

## Oklahoma Municipal Retirement Fund

## SUMMARY OF THE ACTUARIAL COST METHOD

Pension funding requirements are allocated to periods of time using the entry age normal cost method. Assets and liabilities reflect only benefits payable from the OMRF Trust.

Under the entry age normal cost method, the normal cost is computed as the level percent of pay which, if paid from the time an employee became a participant until assumed retirement, would accumulate to a fund sufficient to pay all plan benefits.

The actuarial liability of the plan is the hypothetical accumulation with interest of prior normal costs less payments, from the employee's date of participation to present.

The actuarial liability for non-active partipants is the present value of future benefits anticipated to be paid to current retirees, beneficiaries and deferred vested participants, discounted for interest and mortality.

The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of plan assets. This amount (redetermined each year) is amortized as a level dollar amount over 30 years from the valuation date.

Experience gains (decreases in cost due to favorable experience), or experience losses (increases in cost due to adverse experience), attributable to deviations between the assumed and actual experience of the Plan, are amortized as part of the UAL.

## SUMMARY OF ACTUARIAL ASSUMPTIONS

| Interest Rates | Age | Rates per Thousand |  |  |  |  |  | Annual Pay Increase |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Morality (M) | Mortality (F) | Turnover | Disability | Retire-N | Retire-E |  |
| Purpose Rate |  |  |  |  |  |  |  |  |
| Basic valuation | 20 | 0.545 | 0.305 | 214.60 | 0.80 | 0 | 0 | 7.42\% |
| Before retirement $\quad 7.50 \%$ | 21 | 0.570 | 0.308 | 197.80 | 0.85 | 0 | 0 | 7.19\% |
| After retirement $\quad 7.50 \%$ | 22 | 0.598 | 0.311 | 182.30 | 0.91 | 0 | 0 | 6.97\% |
|  | 23 | 0.633 | 0.313 | 167.90 | 0.96 | 0 | 0 | 6.77\% |
| Mortality Tables | 24 | 0.671 | 0.313 | 154.60 | 1.01 | 0 | 0 | 6.59\% |
| Before retirement UP 1994 | 25 | 0.711 | 0.313 | 142.30 | 1.07 | 0 | 0 | 6.42\% |
| After retirement UP 1994 | 26 | 0.749 | 0.316 | 131.10 | 1.15 | 0 | 0 | 6.26\% |
| with projected mortality improvement | 27 | 0.782 | 0.324 | 120.90 | 1.23 | 0 | 0 | 6.12\% |
|  | 28 | 0.811 | 0.338 | 111.60 | 1.31 | 0 | 0 | 6.00\% |
| Pay Increase Assumption | 29 | 0.838 | 0.356 | 103.20 | 1.39 | 0 | 0 | 5.88\% |
| Annual rates of pay increase | 30 | 0.862 | 0.377 | 95.60 | 1.47 | 0 | 0 | 5.77\% |
| as shown | 31 | 0.883 | 0.401 | 88.70 | 1.60 | 0 | 0 | 5.68\% |
|  | 32 | 0.902 | 0.427 | 82.70 | 1.73 | 0 | 0 | 5.59\% |
| Turnover | 33 | 0.912 | 0.454 | 77.30 | 1.87 | 0 | 0 | 5.52\% |
| Select and ultimate rates | 34 | 0.913 | 0.482 | 72.50 | 2.00 | 0 | 0 | 5.45\% |
| Ultimate rates are age-related as shown | 35 | 0.915 | 0.514 | 68.40 | 2.13 | 0 | 0 | 5.39\% |
| Additional rates per thousand are | 36 | 0.927 | 0.550 | 64.80 | 2.40 | 0 | 0 | 5.33\% |
| added during the first 5 years: | 37 | 0.958 | 0.593 | 61.70 | 2.67 | 0 | 0 | 5.28\% |
| Year 1: 165 | 38 | 1.010 | 0.643 | 59.10 | 2.93 | 0 | 0 | 5.24\% |
| Year 2: 105 | 39 | 1.075 | 0.701 | 56.90 | 3.20 | 0 | 0 | 5.20\% |
| Year 3: 65 | 40 | 1.153 | 0.763 | 55.00 | 3.47 | 0 | 0 | 5.16\% |
| Year 4: 45 | 41 | 1.243 | 0.826 | 53.50 | 3.97 | 0 | 0 | 5.13\% |
| Year 5: 35 | 42 | 1.346 | 0.888 | 52.30 | 4.48 | 0 | 0 | 5.09\% |
|  | 43 | 1.454 | 0.943 | 51.30 | 4.99 | 0 | 0 | 5.06\% |
| Retirement Age | 44 | 1.568 | 0.992 | 50.40 | 5.49 | 0 | 0 | 5.03\% |
| Normal (N) and early (E) rates | 45 | 1.697 | 1.046 | 49.80 | 6.00 | 0 | 0 | 5.00\% |
| Normal rates apply when employee | 46 | 1.852 | 1.111 | 49.20 | 6.00 | 0 | 0 | 4.96\% |
| is at or above normal retirement age. | 47 | 2.042 | 1.196 | 48.60 | 6.00 | 0 | 0 | 4.93\% |
| Early rates apply when employee | 48 | 2.260 | 1.297 | 48.00 | 6.00 | 0 | 0 | 4.89\% |
| is eligible for early (reduced) retirement. | 49 | 2.501 | 1.408 | 47.40 | 6.00 | 0 | 0 | 4.84\% |
|  | 50 | 2.773 | 1.536 | 46.70 | 6.00 | 0 | 0 | 4.80\% |
| Other Assumptions | 51 | 3.088 | 1.686 | 45.90 | 6.80 | 0 | 0 | 4.74\% |
| Percent married 100\% | 52 | 3.455 | 1.864 | 44.80 | 7.60 | 0 | 0 | 4.69\% |
| Spouse age difference 3 | 53 | 3.854 | 2.051 | 43.50 | 8.40 | 0 | 0 | 4.62\% |
| (female spouses younger) | 54 | 4.278 | 2.241 | 42.00 | 9.20 | 0 | 0 | 4.55\% |
|  | 55 | 4.758 | 2.466 | 40.10 | 10.00 | 350 | 70 | 4.46\% |
|  | 56 | 5.322 | 2.755 | 40.00 | 11.23 | 200 | 70 | 4.37\% |
|  | 57 | 6.001 | 3.139 | 40.00 | 12.45 | 200 | 70 | 4.27\% |
| Base mortality rates are shown; | 58 | 6.774 | 3.612 | 40.00 | 13.68 | 200 | 70 | 4.16\% |
| valuation rates are projected for | 59 | 7.623 | 4.154 | 40.00 | 14.91 | 200 | 70 | 4.04\% |
| mortality improvement by the | 60 | 8.576 | 4.773 | 40.00 | 16.13 | 200 | 70 | 4.00\% |
| Society of Actuaries' table AA based on the employee's year of | 61 | 9.663 | 5.476 | 40.00 | 16.13 | 200 | 70 | 4.00\% |
| birth. | 62 | 10.944 | 6.271 | 40.00 | 16.13 | 500 | 300 | 4.00\% |
|  | 63 | 12.335 | 7.179 | 40.00 | 16.13 | 300 | 175 | 4.00\% |
|  | 64 | 13.914 | 8.194 | 40.00 | 16.13 | 300 | 175 | 4.00\% |
|  | 65 | 15.629 | 9.286 | 40.00 | 0.00 | 400 |  | 4.00\% |
|  | 66 | 17.462 | 10.423 | 40.00 | 0.00 | 400 |  | 4.00\% |
|  | 67 | 19.391 | 11.574 | 40.00 | 0.00 | 400 |  | 4.00\% |
|  | 68 | 21.354 | 12.648 | 40.00 | 0.00 | 400 |  | 4.00\% |
|  | 69 | 23.364 | 13.665 | 40.00 | 0.00 | 400 |  | 4.00\% |
|  | 70 | 25.516 | 14.763 | 40.00 | 0.00 | 1000 |  | 4.00\% |

AGE AND SERVICE OF ACTIVE PARTICIPANTS
1/1/2009

| Age Group | 0-4 |  | 5 |  | 10-14 |  | 15-19 |  | 20-24 |  | 25-29 |  | 30-49 |  | All Service |  | Ave Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Ave Pay | Count | Ave Pay | count | Ave Pay | count | Ave Pay | Count | Ave Pay | count | Ave Pay | Count | Ave Pay | Count | Ave Pay |  |
| 15-19 | 1 | 20,313 |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 20,313 |  |
| 20-24 | 3 | 12,827 |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 12,827 |  |
| 25-29 | 1 | 1,635 |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1,635 |  |
| $30-34$ | 2 | 27,469 | 1 | 28,348 |  |  |  |  |  |  |  |  |  |  | 3 | 27,762 |  |
| $35-39$ | 2 | 15,896 |  |  |  |  | 1 | 32,650 |  |  |  |  |  |  | 3 | 21,481 |  |
| $40-44$ | 1 | 22,776 | 1 | 23,353 |  |  | 3 | 39,046 |  |  |  |  |  |  | 5 | 32,654 |  |
| $45-49$ | 2 | 31,431 |  |  |  |  | 1 | 31,551 |  |  | 3 | 41,251 |  |  | 6 | 36,361 |  |
| $50-54$ | 1 | 8,036 |  |  |  |  | 1 | 39,465 |  |  | 1 | 63,161 | 1 | 41,402 | 4 | 38,016 |  |
| $55-59$ | 1 | 22,292 |  |  |  |  |  |  | 1 | 41,402 |  |  |  |  | 2 | 31,847 |  |
| $60-64$ |  |  |  |  | 2 | 29,050 |  |  |  |  |  |  |  |  | 2 | 29,050 |  |
| $65-69$ |  |  |  |  |  |  |  |  | 1 | 47,742 |  |  |  |  | 1 | 47,742 |  |
| $70-109$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 14 |  | 2 |  | 2 |  | 6 |  | 2 |  | 4 |  | 1 |  | 31 |  |  |

Age is in completed years (age last birthday) on the census date. Service is completed years of credited service on the census date.
Pay is the considered compensation for the preceding plan year

## Oklahoma Municipal Retirement Fund

## Warr Acres

SUMMARY OF NONACTIVE PARTICIPANTS


## H

## Actuarial Report

 for the City of Bartlesville
## H Actuarial Report for the City of Bartlesville

This section contains a copy of the 2009 Actuarial Valuation of Funding Requirements for the Employee Retirement System of Bartlesville, Oklahoma. It is included because there are many aspects unique to this plan, including the plan provisions, actuarial cost method and actuarial assumptions.

# Oklahoma Municipal Retirement Fund Employee Retirement System of Bartlesville, Oklahoma <br> <br> ACTUARIAL VALUATION OF FUNDING REQUIREMENTS <br> <br> ACTUARIAL VALUATION OF FUNDING REQUIREMENTS <br> Effective for the Year Starting 

July 1, 2009

March, 2009

Prepared by

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Dallas. TX 75205
(214)891-0990

## INTRODUCTION

This report presents the results of an actuarial valuation of the Employee Retirement System of Bartlesville, Oklahoma.

The purposes of the valuation are:
= to determine the required contribution for the retirement program effective July 1, 2009.

- to provide accounting information required by GASB 50 (funding progress).

Exhibit 1 summarizes the required contribution level for the plan.
Exhibit 2 shows the detailed development of the contribution requirements for the year.
The actuarial value of assets (Exhibit 3) is related to market value, but smoothed to reduce the volatility of contribution requirements. The method for determining the actuarial asset value was changed from prior years by increasing the corridor from 20\% to $30 \%$.

GASB Statement 50 requires the employer to record its progress towards funding the retirement program (see Exhibit 4).

The remainder of the report summarizes the plan provisions, participant data and actuarial valuation assumptions.

Actuarial assumptions were revised this year based on a detailed analysis of the demographic experience of OMRF member cities. Specifically, turnover rates, salary increase rates, and retirement rates were changed. See Exhibit 8 for a description of the new assumptions.

Benefits accrued under the plan as of July 1, 1996 have been secured through annuity contracts with an insurance company. This valuation excludes both assets and liabilities related to these purchased annuities.

## Oklahoma Municipal Retirement System Employee Retirement System of Bartlesville, Oklahoma

## SUMMARY OF REQUIRED CONTRIBUTION RATES

Employee contribution rate
as a percent of pay
Municipality-required contribution rate
as a percent of participant payroll
Total required contribution rate

| Notes: | The municipality-required contribution rate is actuarially measured each plan year as the amount |
| :--- | :--- |
| necessary to fund the plan on a long term basis using the actuarial cost methods and assumptions |  |
| adopted for the plan: |  |
| Cost Method |  |
| Interest rate |  |
| Pay Increases |  |
| Mortality |  |
| Retirement age |  |
| Turnover |  |
| Asset value |  |


| Unit Credit |
| :--- |

7.5 \% per annum
Rates by age
1994 Group Annuity Mortality (projected to 2009)
Rates by age
Rates by age and service

The required contribution rate changes each year, reflecting the actual contributions, the investment gains and losses during the prior year, and the demographic experience of the participant group.

Plan 2.50\% Career Ave, normal retirement age 65, 7 year vesting, 0 years certain, no COLA

## Oklahoma Municipal Retirement Fund Employee Retirement System of Bartlesville, Oklahoma <br> Development of Plan Contribution Requirement

|  | Current Plan |  |
| :---: | :---: | :---: |
|  | 2.50\% Career Ave |  |
| Actuarial liability (unit credit cost method) |  |  |
| Retired, survivors and deferred vested | \$ | 5,336,849 |
| Active employees |  | 7,759,355 |
| Total | \$ | 13,096,204 |
| Assets (actuarial value as of 1-1-2009) |  | 5,857,260 |
| Unfunded actuarial liability | \$ | 7,238,944 |
| Annual amount to amortize the |  | 646,068 |
| Annual normal cost |  | 729,638 |
| Total annual cost | \$ | 1,375,706 |
| Valuation payroll as of 1-1-2009 | \$ | 7,708,287 |
| Required total contribution as a percent of payroll (effective 7-1-2009) |  | 17.85\% |

Notes
See Exhibit 3 for the development of the actuarial value of assets.
See Exhibits 6 and 7 for a description of the actuarial methods and assumptions used in the valuation.
See Exhibits 8 for a summary of the participants.

Plan 2.50\% Career Ave, normal retirement age 65, 7 year vesting, 0 years certain, no COLA

## Oklahoma Municipal Retirement Fund

Employee Retirement System of Bartlesville, Oklahoma
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

| 1 Market Value of Assets as of 1/1/2008 | \$5,532,372 |
| :---: | :---: |
| 2 Actuarial Value of Assets as of 1/1/2008 | \$5,496,136 |
| Percent of Market Value | 99\% |
| 3 Contributions |  |
| Employer | 824,833 |
| Employee | 242,398 |
| 4 Distributions | $(529,165)$ |
| 5 Assumed Yield at Valuation Rate (7.50\%) | 432,388 |
| 6 Preliminary Actuarial Value | 6,466,590 |
| 7 Market Value of Assets as of 1/1/2009 | 4,505,584 |
| $\begin{aligned} & 8 \text { Adjustment } \\ & 25 \% \text { of (7) minus (6) } \end{aligned}$ | $(490,251)$ |
| 9 Minimum Actuarial Value of Assets as of 1/1/2009 $70 \%$ of (7) | \$3,153,909 |
| 10 Maximum Actuarial Value of Assets as of 1/1/2009 $130 \% \text { of }(7)$ | \$5,857,260 |
| 11 Actuarial Value of Assets as of $1 / 1 / 2009$ <br> (6) plus (8), but not less than (9) nor more than (10) | \$5,857,260 |
| 12 AAV as percent of Market Value | 130\% |

An actuarial technique is used to reduce the effect of fluctuations in market value on plan funding requirements.

The actuarial value of assets is equal to the prior year's value adjusted for cash flows and interest at the valuation rate. This amount is adjusted by a percentage of the difference between it and market.

The method for determining the actuarial asset value was changed from prior years by increasing the corridor from $20 \%$ to $30 \%$. If the actuarial asset value would otherwise be outside a $30 \%$ corridor, it is instead equal to the relevant corridor limit.

Oklahoma Municipal Retirement Fund Employee Retirement System of Bartlesville, Oklahoma

## SCHEDULE OF FUNDING PROGRESS

| Actuarial <br> Valuation <br> Date | Value of <br> Assets | Asset <br> Valuation <br> Basis | Actuarial <br> Accrued <br> Liability <br> (AAL) $^{*}$ | Type* | Unfunded <br> AAL <br> (UAAL) | Funded <br> Ratio | Covered <br> Payroll | UAAL as a <br> Percentage of <br> Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 1 / 2000$ | $1,020,473$ | Actuarial | $1,371,407$ | UC | 350,934 | $74.4 \%$ | $5,606,521$ | $6.3 \%$ |
| $1 / 1 / 2001$ | $1,469,623$ | Actuarial | $2,013,106$ | UC | 543,483 | $73.0 \%$ | $5,679,787$ | $9.6 \%$ |
| $1 / 1 / 2002$ | $1,921,264$ | Actuarial | $3,272,152$ | UC | $1,350,888$ | $58.7 \%$ | $5,824,388$ | $23.2 \%$ |
| $1 / 1 / 2003$ | $2,326,665$ | Actuarial | $3,732,622$ | UC | $1,405,957$ | $62.3 \%$ | $5,753,077$ | $24.4 \%$ |
| $1 / 1 / 2004$ | $2,810,838$ | Actuarial | $3,831,659$ | UC | $1,020,821$ | $73.4 \%$ | $5,718,618$ | $17.9 \%$ |
| $1 / 1 / 2005$ | $3,361,482$ | Actuarial | $4,476,154$ | UC | $1,114,673$ | $75.1 \%$ | $6,019,000$ | $18.5 \%$ |
| $1 / 1 / 2006$ | $3,997,881$ | Actuarial | $5,452,141$ | UC | $1,454,260$ | $73.3 \%$ | $5,743,064$ | $25.3 \%$ |
| $1 / 1 / 2007$ | $4,680,888$ | Actuarial | $8,392,743$ | UC | $3,711,855$ | $55.8 \%$ | $7,439,181$ | $49.9 \%$ |
| $1 / 1 / 2008$ | $5,496,136$ | Actuarial | $9,733,979$ | UC | $4,237,843$ | $56.5 \%$ | $7,130,565$ | $59.4 \%$ |
| $1 / 1 / 2009$ | $5,857,260$ | Actuarial | $13,096,204$ | UC | $7,238,944$ | $44.7 \%$ | $7,708,287$ | 93 |

Covered payroll is the total annualized rate of pay as of the July 1 of the valuation date based on actual pay for the preceding year.

|  | Employee Retirement System Of Bartlesville, Oklahoma |
| :---: | :---: |
|  | PLAN SUMMARY |
| Eligibility | All regular, full-time employees except police, firefighters and other employees who are covered under an approved system. |
| Probationary period | - Prior to 7/1/2006: 2 years <br> - On or after 7/1/2006: none. |
| Employee contributions | - Prior to 7/1/2006: none <br> - On or after $7 / 1 / 2006: 3 \%$ of pay. |
| Accrued Benefit | The past service benefit plus the future service benefit: |
|  | Past Service Benefit is equal to $2.50 \%$ of base pay rate on 7/1/1978 times full years of service from hire to $7 / / 1978$. Available only to employees whose participation in the plan began before $7 / 1 / 1978$. |
|  | Future Service Benefit is equal to the sum of: Accumulation of $2.50 \%$ of base pay rate in effect on each July 1 from 7/1/1978 through 7/1/2005. Benefit for a plan year is prorated if the employee does not complete the year. Accumulation of $2.50 \%$ of actual compensation received during plan years beginning 7/1/2006 and after. |
| Benefit Eligibility Normal Retirement | Age 65. Normal retirement date is first of the month on or after age 65 and completion of 7 years of service. |
| Early Retirement | Age 55 with 7 years of service, or meeting the Rule of 80. |
| Disability Retirement | Total and permanent disability with 7 or more years of service. |
| Vested Termination | 7 years of service. |
| Nonvested Termination | Not eligible for any other benefit. |

## Benefit Amount

Normal Retirement

Early Retirement

Disability Retirement

Termination

Nonvested Termination

## Death Benefits

Payment Options

The Accrued Benefit is payable as a life only annuity or another annuity option with actuarial reduction. An employee may elect to defer the start of this annuity.

The Accrued Benefit is payable as a life only annuity starting at age 65 . An employee may elect earlier payment as follows:

If age plus service equals 80 or more:
The full benefit unreduced.
If age plus service are less than 80 :
Actuarially reduced (based on $6 \%$ interest and UP84 mortality).
The Accrued Benefit is payable during the period of disability up to age 65 . An employee who becomes disabled after age 55 with less than 7 years of service is fully vested in the Accrued Benefit payable at age 65.

The accrued benefit payable at age 65 , or at the participant's option, the actuarially reduced accrued benefit payable after age 55 .

Return of employee contributions with interest.

## Before vesting

Return of employee contributions with interest.
After vesting (married participants)
The surviving spouse receives $50 \%$ of the participant's accrued benefit for life or until remarriage.

## After vesting (unmarried participants)

The beneficiary receives 120 monthly payments in the amount of $50 \%$ of the participant's accrued benefit at the time of death.

Disability retirement benefits are payable during the participant's lifetime only. Benefits cease when the participant reaches age 65, at which time the participant becomes entitled to a normal retirement benefit equal to the accrued benefit.

If a disabled participant recovers from disability prior to age 65 , disability retirement benefits cease. The participant is then entitled to the accrued benefit as a termination benefit.

Normal retirement, early retirement, and termination benefits may be received either as a life annuity, or an actuarially equivalent benefit under one of the following forms:

1. Life with $5,10,15$ or 20 years certain
2. Joint and $100 \%$ survivor annuity (spouse only)
3. Joint and $100 \%$ survivor annuity with 5,10 or 15 years certain.

Actuarial equivalency based on 6\% interest, UP84 mortality.

## Employee Retirement System of Bartlesville, Oklahoma

## SUMMARY OF THE ACTUARIAL COST METHOD

Pension funding requirements are allocated to periods of time using the unit credit cost method. Assets and liabilities reflect onlv benefits pavable from the OMRF Trust.

Under the unit credit cost method, the normal cost is computed as the present value of the increase in accrued retirement income for each employee's service during the following year.

The actuarial liability of the plan is the present value of the accrued retirement income earned to date. Present values are discounted for interest, mortality, turnover, and retirement rates by age.

The actuarial liability for non-active partipants is the present value of future benefits anticipated to be paid to current retirees, beneficiaries and deferred vested participants, discounted for interest and mortality.

The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of plan assets. This amount (redetermined each year) is being amortized as a level dollar amount through July 1, 2032.

Experience gains (decreases in cost due to favorable experience), or experience losses (increases in cost due to adverse experience), atributable to deviations between the assumed and actual experience of the Plan, are amortized as part of the UAL.

## Oklahoma Municipal Retirement Fund

SUMMARY OF ACTUARIAL ASSUMPTIONS

| Interest Rates | Age | Rates per Thousand |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mortality (M) | Mortality (F) | Turnover | Disability | Retire-N | Retire-E |
| Purpose Rate |  |  |  |  |  |  |  |
| Basic valuation | 20 | 0.409 | 0.239 | 214.60 | 0.80 | 0 | 0 |
| Before retirement 7.50\% | 21 | 0.426 | 0.234 | 197.80 | 0.85 | 0 | 0 |
| After retirement $\quad 7.50 \%$ | 22 | 0.447 | 0.232 | 182.30 | 0.91 | 0 | 0 |
|  | 23 | 0.482 | 0.234 | 167.90 | 0.96 | 0 | 0 |
| Mortality Tables | 24 | 0.523 | 0.235 | 154.60 | 1.01 | 0 | 0 |
| Before retirement UP 1994p2009 | 25 | 0.582 | 0.236 | 142.30 | 1.07 | 0 | 0 |
| After retirement UP 1994p2009 | 26 | 0.660 | 0.245 | 131.10 | 1.15 | 0 | 0 |
| with projected mortality improvement | 27 | 0.700 | 0.248 | 120.90 | 1.23 | 0 | 0 |
|  | 28 | 0.723 | 0.256 | 111.60 | 1.31 | 0 | 0 |
| Pay Increase Assumption | 29 | 0.743 | 0.266 | 103.20 | 1.39 | 0 | 0 |
| Annual rates of pay increase as shown | 30 | 0.760 | 0.293 | 95.60 | 1.47 | 0 | 0 |
|  | 31 | 0.775 | 0.325 | 88.70 | 1.60 | 0 | 0 |
|  | 32 | 0.788 | 0.344 | 82.70 | 1.73 | 0 | 0 |
| Turnover | 33 | 0.793 | 0.352 | 77.30 | 1.87 | 0 | 0 |
| Select and ultimate rates | 34 | 0.789 | 0.360 | 72.50 | 2.00 | 0 | 0 |
| Ultimate rates are age-related as shown | 35 | 0.787 | 0.369 | 68.40 | 2.13 | 0 | 0 |
| Additional rates per thousand are added during the first 5 years: | 36 | 0.794 | 0.378 | 64.80 | 2.40 | 0 | 0 |
|  | 37 | 0.816 | 0.390 | 61.70 | 2.67 | 0 | 0 |
| Year 1: 165 | 38 | 0.828 | 0.404 | 59.10 | 2.93 | 0 | 0 |
| Year 2: 105 | 39 | 0.847 | 0.419 | 56.90 | 3.20 | 0 | 0 |
| Year 3: 65 | 40 | 0.870 | 0.450 | 55.00 | 3.47 | 0 | 0 |
| Year 4: 45 | 41 | 0.898 | 0.479 | 53.50 | 3.97 | 0 | 0 |
| Year 5: 35 | 42 | 0.928 | 0.508 | 52.30 | 4.48 | 0 | 0 |
|  | 43 | 0.955 | 0.531 | 51.30 | 4.99 | 0 | 0 |
| Retirement Age | 44 | 0.979 | 0.550 | 50.40 | 5.49 | 0 | 0 |
| Normal ( N ) and early ( E ) rates | 45 | 1.005 | 0.549 | 49.80 | 6.00 | 0 | 0 |
| Normal rates apply when employee is at or above normal retirement age. | 46 | 1.039 | 0.550 | 49.20 | 6.00 | 0 | 0 |
|  | 47 | 1.082 | 0.558 | 48.60 | 6.00 | 0 | 0 |
| Early rates apply when employee | 48 | 1.130 | 0.594 | 48.00 | 6.00 | 0 | 0 |
| is eligible for early (reduced) retirement. | 49 | 1.176 | 0.633 | 47.40 | 6.00 | 0 | 0 |
|  | 50 | 1.225 | 0.710 | 46.70 | 6.00 | 0 | 0 |
| Other Assumptions | 51 | 1.278 | 0.803 | 45.90 | 6.80 | 0 | 0 |
| Percent married $100 \%$ | 52 | 1.337 | 0.961 | 44.80 | 7.60 | 0 | 0 |
| Spouse age difference (female spouses younger) | 53 | 1.461 | 1.149 | 43.50 | 8.40 | 0 | 0 |
|  | 54 | 1.590 | 1.370 | 42.00 | 9.20 | 0 | 0 |
|  | 55 | 1.823 | 1.650 | 40.10 | 10.00 | 350 | 70 |
|  | 56 | 2.107 | 2.027 | 40.00 | 11.23 | 200 | 70 |
|  | 57 | 2.460 | 2.419 | 40.00 | 12.45 | 200 | 70 |
|  | 58 | 2.881 | 2.769 | 40.00 | 13.68 | 200 | 70 |
|  | 59 | 3.191 | 3.169 | 40.00 | 14.91 | 200 | 70 |
|  | 60 | 3.532 | 3.623 | 40.00 | 16.13 | 200 | 70 |
|  | 61 | 4.145 | 4.136 | 40.00 | 16.13 | 200 | 70 |
|  | 62 | 4.624 | 4.713 | 40.00 | 16.13 | 500 | 300 |
|  | 63 | 5.445 | 5.368 | 40.00 | 16.13 | 300 | 175 |
|  | 64 | 6.056 | 6.096 | 40.00 | 16.13 | 300 | 175 |
|  | 65 | 6.707 | 6.874 | 40.00 | 0.00 | 400 |  |
|  | 66 | 7.860 | 7.677 | 40.00 | 0.00 | 400 |  |
|  | 67 | 8.615 | 8.482 | 40.00 | 0.00 | 400 |  |
|  | 68 | 8.785 | 9.223 | 40.00 | 0.00 | 400 |  |
|  | 69 | 9.477 | 9.915 | 40.00 | 0.00 | 400 |  |
|  | 70 | 9.554 | 10.658 | 40.00 | 0.00 | 1000 |  |

## Oklahoma Municipal Retirement Fund

## Bartlesville

AGE AND SERVICE OF ACTIVE PARTICIPANTS

$$
\text { January 1, } 2009
$$

| Age Group |  |  | 5-9 |  | 10-14 |  | 15 |  | 20-24 |  |  |  | 30-49 All Service |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay | Count | Ave Pay |
| 15-19 | 1 | 3,658 |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 3,658 |
| 20-24 | 9 | 18,063 |  |  |  |  |  |  |  |  |  |  |  |  | 9 | 18,063 |
| 25-29 | 16 | 25,981 | 3 | 31,010 |  |  |  |  |  |  |  |  |  |  | 19 | 26,775 |
| 30-34 | 16 | 26,226 | 4 | 33,181 | 1 | 32,601 |  |  |  |  |  |  |  |  | 21 | 27,854 |
| 35-39 | 11 | 25,437 | 5 | 47,762 | 2 | 44,928 | 4 | 43,690 |  |  |  |  |  |  | 22 | 35,601 |
| 40-44 | 11 | 23,633 | 7 | 39,488 | 4 | 39,723 | 3 | 42,655 | 6 | 45,504 |  |  |  |  | 31 | 35,363 |
| 45-49 | 5 | 30,848 | 7 | 35,762 | 3 | 39,233 | 9 | 49,690 | 7 | 41,489 | 10 | 38,982 | 1 | 45,784 | 42 | 40,369 |
| 50-54 | 6 | 29,003 | 4 | 40,993 | 4 | 46,117 | 7 | 36,485 | 10 | 41,755 | 6 | 38,814 | 2 | 41,873 | 39 | 38,770 |
| 55-59 | 4 | 17,796 | 3 | 34,626 | 2 | 65,652 |  |  | 6 | 36,970 | 4 | 50,356 | 1 | 34,011 | 20 | 38,181 |
| 60-64 | 5 | 31,435 | 1 | 26,275 | 1 | 31,469 | 5 | 59,556 |  |  |  |  | 1 | 38,010 | 13 | 42,362 |
| 65-69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70-109 |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 47,038 | 1 | 47,038 |
| All Ages | 84 |  | 34 |  | 17 |  | 28 |  | 29 |  | 20 |  | 6 |  | 218 |  |

Age is in completed years (age last birthday) on the census date.
Service is completed years of credited service on the census date.
Pay is the considered compensation for the preceding plan year.

Oklahoma Municipal Retirement Fund
Bartlesville
SUMMARY OF NONACTIVE PARTICIPANTS



| $20-29$ $30-39$ | 4 | 13,754 | 33.36 | 1 | 6,600 | 34.96 | 5 | 20,354 | 33.88 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $30-39$ $40-49$ | 4 9 | 13,754 61,363 | 33.36 45.89 | 6 | 36,145 | 44.71 | 15 | 97,508 | 45.45 |
| $50-54$ | 6 | 54,292 | 52.56 | 1 | 4,230 | 52.16 | 7 | 58,522 | 52.53 |
| $55-59$ | 6 | 47,400 | 57.48 | 1 | 7,246 | 57.35 | 7 | 54,646 | 57.46 |
| 60-64 | 1 | 6,410 | 63.31 | 2 | 16,836 | 60.68 | 3 | 23,246 | 61.41 |
| $\begin{array}{r} 65-69 \\ 10 \end{array}$ |  |  |  |  |  |  |  |  |  |
| Totals | 26 | 183,218 | 50.53 | 11 | 71,057 | 49.32 | 37 | 254,275 | 50.19 |
| Ave amount |  | 7,046.86 |  |  | 6,459.74 |  |  | 6,872.31 |  |
| Grand Totals | 75 | 549,081 | 57.18 | 32 | 212,964 | 55.68 | 107 | 762,045 | 56.76 |
| Ave amount |  | 7,321.08 |  |  | 6,655.13 |  |  | 7,121.92 |  |

