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**Oklahoma Municipal Retirement Fund**

**ACTUARIAL VALUATION OF FUNDING REQUIREMENTS**

**Effective for the Year Starting  
July 1, 2004**

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April 30, 2004

Prepared by

**DEAN & COMPANY**  
*CONSULTING ACTUARIES*  
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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, 2004, 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, 2004.
- to provide accounting information required by GASB 25 (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 & COMPANY

April 30, 2004  
Date



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**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 2004 actuarial valuation. These rates will be in effect from July 1, 2004 through June 30, 2005. The following information is presented for each city:

- Whether the plan has an unfunded actuarial liability or a surplus (*UAL or Surplus*). In general, as long as there is an unfunded actuarial accrued liability, it is amortized as a level dollar amount over 30 years. When plan assets equal or exceed the actuarial accrued liability, 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 2004 valuation for each plan. The rate determined under the 2003 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 2004-04 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 7½%, or demographic changes more favorable than assumed). In these cases, the required employer contribution rate effective 7/1/03 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.

**Oklahoma Municipal Retirement Fund**  
**COMPARISON OF REQUIRED CONTRIBUTION RATES**

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2003	7/1/2004			
Adair	UAL	9.01%	9.36%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	Upgrade
Altus	UAL	10.40%	10.58%	4.00%	Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA	
Alva	Surplus	1.68%	0.99%	0.00%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Antlers	UAL	6.41%	5.88%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Bartlesville	UAL	8.07%	7.79%	0.00%	Plan BAR, normal retirement age 65, 7 year vesting, 0 years certain, no COLA	
Bethany	UAL	21.82%	24.24%	4.60%	Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, COLA	
Bethany/Warr Acres	UAL	9.91%	11.35%	2.53%	Plan AAA, normal retirement age 65, 7 year vesting, 10 years certain, no COLA	
Billings	UAL	6.15%	6.35%	3.00%	Plan A, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Binger	UAL	5.17%	4.86%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Blackwell	Surplus	9.24%	9.61%	4.50%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Blair	Surplus	10.70%	8.43%	3.41%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Boise City	UAL	15.00%	15.99%	0.00%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	Vesting
Braman	UAL	11.64%	14.82%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	Upgrade
Bristow	UAL	20.22%	19.75%	5.25%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, COLA	
Broken Bow	UAL	7.69%	13.05%	4.50%	Plan BB, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Buffalo	UAL	9.65%	11.63%	3.50%	Plan AA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Burns Flat	UAL	8.48%	9.26%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Calera	UAL	5.63%	5.16%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Central Okla Master Cons	UAL	22.79%	21.12%	6.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, COLA	

**Oklahoma Municipal Retirement Fund**  
**COMPARISON OF REQUIRED CONTRIBUTION RATES**

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2003	7/1/2004			
Chandler	UAL	8.66%	8.63%	3.75%	Plan CC, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Checotah	UAL	10.27%	10.18%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Chickasha	Surplus	2.50%	2.50%	2.50%	Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, COLA	
Claremore	UAL	14.08%	14.06%	3.75%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Cleo Springs	UAL	27.73%	9.46%	3.73%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Cleveland	UAL	10.52%	10.24%	0.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Clinton	Surplus	5.25%	5.25%	5.25%	Plan AA, normal retirement age 62/30, 7 year vesting, 10 years certain, COLA	
Collinsville	Surplus	7.93%	7.31%	2.00%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Cordell	UAL	8.58%	12.66%	0.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Cushing	UAL	14.13%	15.11%	0.00%	Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA	
Davis	UAL	8.70%	9.90%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Del City	Surplus	12.90%	15.30%	0.00%	Plan AAA, special retirement provisions, 7 year vesting, 10 years certain, COLA	
Dewey	Surplus	4.00%	4.00%	4.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Drumright	UAL	14.24%	15.07%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Durant	Surplus	4.88%	7.16%	0.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Eufaula	UAL	8.93%	8.91%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Fort Cobb	UAL	10.60%	10.60%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Foss Reservoir Public Works	UAL	11.23%	12.22%	3.75%	Plan BB, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Frederick	UAL	16.29%	16.13%	4.03%	Plan BB, 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
		7/1/2003	7/1/2004			
Garber	UAL	4.55%	4.38%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Geary	Surplus	6.26%	7.52%	2.26%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Gore and Gore PWA	UAL	8.83%	8.61%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Granite	Surplus	8.42%	10.91%	4.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Guthrie	Surplus	5.54%	3.69%	3.69%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Guymon	UAL	7.09%	7.28%	0.00%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Harrah	UAL	15.33%	13.55%	4.50%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Healdton	UAL	9.18%	9.98%	3.75%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Henryetta	UAL	7.37%	6.82%	0.65%	Plan CC, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Hooker	UAL	8.81%	9.52%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Hulbert	UAL	10.34%	10.57%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Hydro	UAL	8.23%	8.45%	3.00%	Plan A, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Kansas	UAL	7.36%	9.87%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Kingston	UAL	8.19%	8.27%	2.00%	Plan A, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Krebs & Krebs Utility Auth.	UAL	9.88%	9.28%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Laverne	UAL	7.51%	8.07%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Lindsay	UAL	12.82%	13.66%	3.75%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Madill	UAL	8.56%	8.64%	3.74%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Mannford	UAL	16.02%	17.04%	5.25%	Plan AA, Rule of 80, 5 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
		7/1/2003	7/1/2004			
Marietta	Surplus	7.97%	4.50%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Marietta PWA	UAL	17.69%	22.23%	5.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
McLoud	UAL	8.31%	6.83%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Medford	UAL	20.06%	21.21%	2.00%	Plan AA, normal retirement age 62/30, 10 year vesting, 10 years certain, COLA	
Meeker	Surplus	5.32%	6.17%	3.00%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Mooreland	Surplus	4.18%	5.88%	1.20%	Plan BB, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Mountain Park Master Cons	UAL	12.04%	13.58%	5.43%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Muldrow	UAL	8.85%	9.01%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Mustang	UAL	13.64%	14.86%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	Ret age
Newkirk	UAL	15.38%	15.42%	4.50%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Nichols Hills	UAL	22.37%	25.97%	5.00%	Plan AA, Rule of 80, 7 year vesting, 10 years certain, COLA	
Noble	UAL	12.17%	11.20%	3.35%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Nowata	Surplus	7.58%	10.27%	5.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Oilton	Surplus	4.03%	5.05%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Okeene	Surplus	3.60%	4.88%	3.60%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Okemah	UAL	5.39%	5.45%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Oklahoma Municipal League	Surplus	9.64%	9.98%	0.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, COLA	
Okmulgee	Surplus	3.50%	5.32%	0.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Owasso	UAL	12.32%	12.61%	4.26%	Plan AA, normal retirement age 62/30, 5 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
		7/1/2003	7/1/2004			
Pawnee	Surplus	7.86%	5.64%	3.75%	Plan CC, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Perkins	UAL	15.09%	15.01%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Perry	Surplus	3.00%	3.44%	3.00%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Pond Creek	UAL	11.36%	13.12%	3.00%	Plan A, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Poteau	UAL	10.50%	10.72%	3.75%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Ringling	UAL	5.89%	6.07%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Sallisaw	UAL	18.51%	19.53%	6.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Seiling	UAL	12.21%	13.18%	4.90%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Shawnee	UAL	11.48%	15.59%	0.00%	Plan AA, Rule of 80, 7 year vesting, 10 years certain, COLA	
Spencer	Surplus	5.25%	9.27%	5.25%	Plan AA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Spiro	UAL	9.26%	8.92%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Stilwell	UAL	9.87%	10.06%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Stratford	Surplus	2.54%	2.41%	1.39%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Stroud	UAL	8.97%	9.76%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Sulphur	UAL	12.96%	15.56%	5.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Talihina & TPWA	UAL	10.74%	10.16%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Thomas	UAL	14.65%	16.81%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Tipton	UAL	5.91%	6.70%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Tonkawa	Surplus	9.57%	11.25%	3.50%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	Ee rate

**Oklahoma Municipal Retirement Fund  
COMPARISON OF REQUIRED CONTRIBUTION RATES**

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2003	7/1/2004			
Velma	UAL	6.00%	6.03%	1.87%	Plan B, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Vian	UAL	5.94%	5.61%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Vinita	UAL	18.54%	20.09%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, COLA	
Wakita	UAL	11.98%	11.84%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Warr Acres	UAL	10.01%	11.58%	2.13%	Plan AA, special retirement provisions, 10 year vesting, 5 years certain, no COLA	
Watonga	UAL	20.01%	20.29%	4.00%	Plan AAA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Waukomis	Surplus	9.07%	7.50%	4.40%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Waurika	Surplus	9.75%	10.20%	2.50%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Webbers Falls	UAL	4.23%	4.54%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Wellston	UAL	7.66%	7.79%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Westville Utility Authority	UAL	6.10%	6.68%	1.50%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Wetumka	UAL	19.29%	20.87%	4.50%	Plan BB, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Yale	Surplus	12.40%	10.79%	2.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Yukon	UAL	15.01%	15.12%	0.00%	Plan AA, normal retirement age 62/30, 5 year vesting, 5 years certain, no COLA	
<b>Weighted Avg Contribution Rates</b>		<b>10.86%</b>	<b>11.76%</b>	<b>2.69%</b>		

Averages exclude the City of Bartlesville

# **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, 2004, disclosure information required under GASB 25, 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 pay in calendar year 2003 to employees who were active participants on January 1, 2004. Pay for employees hired in 2003 is annualized in determining valuation payroll.
- The *present value of benefits (PVB)*. This is the total of all future benefits expected to be paid to plan participants as of January 1, 2004, discounted to the valuation date at the assumed rate of return (8% for the City of Mustang, 7.5% for all other 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 25, 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 25, 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 25. 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  
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
Adair	EAN	74,659	137,465	144,633	62,016	154,143	79,484	48.4%	57.8%	6	3
Altus	EAN	13,019,257	4,230,289	11,930,327	4,271,784	13,275,713	256,456	98.1%	6.1%	151	47
Alva	EAN	1,846,358	1,314,758	1,727,262	195,239	1,477,572	(368,786)	125.0%	(28.0)%	61	4
Antlers	EAN	344,001	469,896	450,748	123,107	418,439	74,439	82.2%	15.8%	27	10
Bartlesville	UC	2,810,838	5,718,618	5,861,830	1,811,642	3,831,659	1,020,821	73.4%	17.9%	173	67
Bethany	EAN	10,801,871	2,640,205	11,381,096	3,727,323	12,517,578	1,715,706	86.3%	65.0%	73	41
Bethany/Warr Acres	EAN	1,130,741	325,998	1,351,802	55,354	1,180,055	49,313	95.8%	15.1%	9	1
Billings	EAN	63,277	80,215	73,157	35,417	67,360	4,083	93.9%	5.1%	4	2
Binger	EAN	23,677	94,438	67,134	0	42,799	19,122	55.3%	20.2%	4	0
Blackwell	EAN	4,387,625	1,023,161	3,389,542	1,643,188	4,265,970	(121,656)	102.9%	(11.9)%	40	35
Blair	EAN	73,774	91,804	141,320	0	61,925	(11,850)	119.1%	(12.9)%	4	0
Boise City	EAN	766,199	256,408	776,660	278,213	962,328	196,129	79.6%	76.5%	11	5
Braman	EAN	38,016	51,025	96,545	0	67,434	29,418	56.4%	57.7%	2	0
Bristow	EAN	1,101,222	554,751	1,424,956	382,976	1,302,176	200,954	84.6%	36.2%	28	9
Broken Bow	EAN	981,340	1,110,161	1,913,216	275,588	1,525,097	543,757	64.3%	49.0%	51	10
Buffalo	EAN	911,104	350,615	667,104	575,209	944,249	33,144	96.5%	9.5%	14	3
Burns Flat	EAN	60,873	116,685	162,799	15,197	143,339	82,466	42.5%	70.7%	5	1
Calera	EAN	96,044	305,859	212,509	31,154	188,242	92,197	51.0%	30.1%	15	2
Central Okla Master Cons	EAN	581,973	214,711	551,197	441,202	750,616	168,643	77.5%	78.5%	7	4

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
Chandler	EAN	659,258	626,366	801,827	279,926	709,384	50,126	92.9%	8.0%	27	9
Checotah	EAN	185,086	1,014,729	1,063,657	75,690	729,049	543,964	25.4%	53.6%	44	5
Chickasha	EAN	10,682,675	1,810,533	7,847,762	2,743,374	8,800,007	(1,882,669)	121.4%	(104.0)%	80	49
Claremore	EAN	8,928,327	5,244,103	13,032,902	1,840,890	10,664,503	1,736,176	83.7%	33.1%	183	29
Cleo Springs	EAN	50,932	20,023	74,124	0	74,124	23,192	68.7%	115.8%	1	0
Cleveland	EAN	1,266,267	403,849	1,119,339	461,063	1,329,953	63,686	95.2%	15.8%	15	11
Clinton	EAN	7,294,146	1,426,629	4,271,274	2,964,722	5,814,946	(1,479,200)	125.4%	(103.7)%	59	32
Collinsville	EAN	1,721,419	1,071,019	1,801,002	457,777	1,654,807	(66,612)	104.0%	(6.2)%	43	9
Cordell	EAN	3,035,548	735,635	2,739,065	881,294	3,047,237	11,688	99.6%	1.6%	31	14
Cushing	EAN	8,574,393	2,583,104	8,144,193	4,020,030	10,605,055	2,030,662	80.9%	78.6%	94	69
Davis	EAN	777,428	829,181	1,309,695	76,208	981,602	204,174	79.2%	24.6%	40	3
Del City	EAN	11,723,879	2,227,445	10,635,645	3,356,302	11,655,963	(67,916)	100.6%	(3.0)%	77	32
Dewey	EAN	1,156,562	324,941	529,315	649,833	951,953	(204,609)	121.5%	(63.0)%	18	11
Drumright	EAN	1,087,054	618,216	1,063,254	806,532	1,387,236	300,182	78.4%	48.6%	23	10
Durant	EAN	9,942,853	3,062,494	7,907,749	3,506,893	8,477,091	(1,465,762)	117.3%	(47.9)%	117	45
Eufaula	EAN	564,585	501,024	732,342	188,615	646,986	82,401	87.3%	16.4%	19	3
Fort Cobb	EAN	10,606	127,790	155,762	0	111,594	100,988	9.5%	79.0%	6	0
Foss Reservoir Public Works	EAN	409,126	166,500	493,519	115,039	529,512	120,387	77.3%	72.3%	5	3
Frederick	EAN	1,603,314	910,742	2,063,725	872,535	2,453,505	850,191	65.3%	93.4%	40	15



**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
Garber	EAN	15,466	81,306	30,747	16,767	27,751	12,285	55.7%	15.1%	4	1
Geary	EAN	448,866	380,807	499,281	163,644	446,782	(2,085)	100.5%	(0.5)%	20	7
Gore and Gore PWA	EAN	21,649	359,499	275,935	10,488	146,763	125,114	14.8%	34.8%	25	1
Granite	EAN	727,596	220,151	540,576	340,705	654,070	(73,526)	111.2%	(33.4)%	9	2
Guthrie	EAN	3,351,544	1,367,964	2,969,373	545,194	2,512,811	(838,733)	133.4%	(61.3)%	59	13
Guymon	EAN	3,606,283	2,242,628	4,162,729	610,950	3,757,328	151,045	96.0%	6.7%	82	15
Harrah	EAN	576,303	443,315	930,857	175,839	835,434	259,132	69.0%	58.5%	16	4
Healdton	EAN	576,764	473,113	792,929	126,181	589,104	12,340	97.9%	2.6%	23	2
Henryetta	EAN	2,010,076	963,556	1,339,442	1,135,347	2,010,585	509	100.0%	0.1%	43	23
Hooker	EAN	189,649	277,534	361,103	28,715	269,279	79,630	70.4%	28.7%	11	2
Hulbert	EAN	54,427	214,611	289,624	52	238,826	184,400	22.8%	85.9%	9	0
Hydro	EAN	201,047	126,521	147,367	136,846	235,524	34,477	85.4%	27.3%	6	3
Kansas	EAN	26,608	59,555	41,889	47,621	77,442	50,834	34.4%	85.4%	3	2
Kingston	EAN	211,214	255,852	399,365	1,351	317,280	106,066	66.6%	41.5%	12	0
Krebs & Krebs Utility Auth.	EAN	70,543	235,624	185,511	89,145	184,669	114,126	38.2%	48.4%	11	3
Laverne	EAN	609,109	426,756	531,944	345,063	698,286	89,178	87.2%	20.9%	19	7
Lindsay	EAN	2,857,683	789,116	2,689,162	896,645	3,022,580	164,897	94.5%	20.9%	32	14
Madill	EAN	1,142,198	670,182	1,068,772	471,251	1,203,567	61,369	94.9%	9.2%	25	9
Mannford	EAN	1,374,184	795,643	1,494,941	1,043,878	1,870,470	496,285	73.5%	62.4%	30	16

**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
Marietta	EAN	714,480	290,718	374,854	389,715	562,580	(151,900)	127.0%	(52.2)%	14	9
Marietta PWA	EAN	406,589	125,281	412,075	257,110	601,124	194,535	67.6%	155.3%	4	3
McLoud	EAN	172,228	222,107	182,139	107,403	204,926	32,699	84.0%	14.7%	13	8
Medford	EAN	862,933	265,617	776,804	560,713	1,084,726	221,793	79.6%	83.5%	11	5
Meeker	EAN	236,697	207,468	316,649	22,835	217,125	(19,573)	109.0%	(9.4)%	9	4
Mooreland	EAN	664,486	200,701	582,238	151,089	634,720	(29,766)	104.7%	(14.8)%	8	3
Mountain Park Master Cons	EAN	366,640	100,956	464,607	33,924	439,796	73,156	83.4%	72.5%	4	1
Muldrow	EAN	541,478	571,389	830,463	156,321	651,739	110,260	83.1%	19.3%	23	3
Mustang	EAN	1,392,235	1,132,122	2,360,275	356,535	1,916,820	524,585	72.6%	46.3%	32	7
Newkirk	EAN	1,045,060	420,950	1,079,383	570,000	1,356,598	311,538	77.0%	74.0%	16	9
Nichols Hills	EAN	3,084,133	1,120,387	3,762,310	1,183,137	3,699,413	615,280	83.4%	54.9%	36	15
Noble	EAN	570,367	357,830	655,220	273,599	716,333	145,966	79.6%	40.8%	15	8
Nowata	EAN	971,457	506,350	813,961	514,800	821,300	(150,156)	118.3%	(29.7)%	25	17
Oilton	EAN	151,386	204,314	137,598	89,819	151,100	(286)	100.2%	(0.1)%	10	3
Okeene	EAN	456,319	149,722	288,137	214,511	369,952	(86,367)	123.3%	(57.7)%	7	7
Okemah	EAN	250,951	517,606	435,879	80,301	361,312	110,362	69.5%	21.3%	27	5
Oklahoma Municipal League	EAN	3,570,632	950,480	3,593,308	510,564	3,275,350	(295,281)	109.0%	(31.1)%	22	14
Okmulgee	EAN	8,714,667	2,708,951	7,668,631	1,976,984	7,235,475	(1,479,193)	120.4%	(54.6)%	104	30
Owasso	EAN	4,011,597	3,239,801	6,055,535	1,102,838	4,625,225	613,628	86.7%	18.9%	99	26

**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
Pawnee	EAN	1,060,051	637,874	764,115	562,226	958,998	(101,053)	110.5%	(15.8)%	25	12
Perkins	EAN	367,324	265,167	393,523	306,058	530,411	163,087	69.3%	61.5%	11	4
Perry	EAN	2,363,079	1,246,231	2,263,234	403,489	2,002,993	(360,086)	118.0%	(28.9)%	62	13
Pond Creek	EAN	349,561	233,294	359,610	310,901	573,374	223,813	61.0%	95.9%	11	5
Poteau	EAN	3,074,457	1,270,416	2,757,718	1,453,114	3,396,982	322,525	90.5%	25.4%	55	24
Ringling	EAN	93,514	188,961	161,185	34,591	122,602	29,088	76.3%	15.4%	8	2
Sallisaw	EAN	6,273,456	2,279,049	6,948,761	3,446,352	8,529,899	2,256,442	73.5%	99.0%	91	33
Selling	EAN	480,184	275,129	519,475	228,405	556,956	76,772	86.2%	27.9%	10	4
Shawnee	EAN	19,956,987	5,273,332	21,131,475	4,982,776	20,893,487	936,500	95.5%	17.8%	160	48
Spencer	EAN	704,348	197,492	263,339	468,259	578,616	(125,732)	121.7%	(63.7)%	10	10
Spiro	EAN	491,186	392,260	702,992	121,541	664,392	173,207	73.9%	44.2%	16	5
Stilwell	EAN	1,524,755	2,061,737	3,047,626	421,538	2,670,867	1,146,112	57.1%	55.6%	79	9
Stratford	EAN	55,770	296,740	104,285	618	44,984	(10,786)	124.0%	(3.6)%	15	0
Stroud	EAN	2,076,721	899,674	1,651,694	1,146,474	2,442,410	365,689	85.0%	40.6%	40	19
Sulphur	EAN	1,649,266	752,463	2,183,448	408,519	1,960,337	311,070	84.1%	41.3%	31	8
Talihina & TPWA	EAN	64,476	342,869	427,014	0	337,187	272,711	19.1%	79.5%	18	0
Thomas	EAN	545,572	179,241	617,276	215,186	724,879	179,307	75.3%	100.0%	6	6
Tipton	EAN	21,920	102,839	78,055	16,725	74,391	52,471	29.5%	51.0%	5	1
Tonkawa	EAN	1,626,733	513,369	1,327,731	686,687	1,623,224	(3,510)	100.2%	(0.7)%	18	15

**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
Velma	EAN	59,649	120,311	107,511	3,545	68,804	9,155	86.7%	7.6%	6	1
Vian	EAN	43,674	157,539	104,907	33,261	106,849	63,175	40.9%	40.1%	7	3
Vinita	EAN	4,114,808	1,468,253	4,632,164	1,877,335	5,177,731	1,062,923	79.5%	72.4%	63	21
Wakita	EAN	58,526	72,541	142,643	0	114,223	55,697	51.2%	76.8%	3	0
Warr Acres	EAN	4,015,751	1,130,804	3,132,723	1,952,462	4,284,433	268,682	93.7%	23.8%	37	20
Watonga	EAN	2,999,098	783,650	2,245,500	2,291,011	3,862,333	863,234	77.6%	110.2%	30	18
Waukomis	EAN	289,809	100,241	181,575	158,629	272,378	(17,431)	106.4%	(17.4)%	5	3
Waurika	EAN	567,500	245,570	539,469	183,119	522,788	(44,712)	108.6%	(18.2)%	12	4
Webbers Falls	EAN	19,767	285,988	138,185	7,933	78,522	58,755	25.2%	20.5%	15	1
Wellston	EAN	199,284	229,694	293,358	44,076	243,250	43,966	81.9%	19.1%	11	2
Westville Utility Authority	EAN	81,865	186,191	120,141	76,520	135,928	54,063	60.2%	29.0%	9	1
Wetumka	EAN	596,681	349,568	931,032	366,702	1,109,186	512,505	53.8%	146.6%	18	9
Yale	EAN	1,071,366	383,432	1,230,398	116,717	1,043,589	(27,777)	102.7%	(7.2)%	20	5
Yukon	EAN	7,685,761	3,078,152	7,033,160	4,916,642	9,797,828	2,112,087	78.4%	68.6%	95	60
<b>Total</b>		<b>219,624,753</b>	<b>92,467,934</b>	<b>224,186,919</b>	<b>79,200,626</b>	<b>237,330,194</b>	<b>17,705,441</b>	<b>92.5%</b>	<b>19.1%</b>	<b>3,527</b>	<b>1,260</b>

Totals exclude plans with only nonactive participants.

**C**

**Funded Status of Plans with  
No Active Participants**

## C Funded Status of Plans with No Active Participants

There are 14 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, 2004, 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 25.
- The *market value of assets*. This amount should be disclosed as the actuarial value of assets in the employer's financial statements under GASB 25. See Section D for more detail on the trust fund activity during 2003.
- 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 25.
- 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 25.
- 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  
Employee Retirement System of Ardmore, Oklahoma**

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	9	\$193,870
Survivors	6	200,238
Disabled	2	53,950
Deferred Vested	<u>1</u>	<u>39,982</u>
Totals	18	<b>\$488,040</b>
Market Value of Assets		<b>\$766,708</b>
Deficiency (Surplus)		<b>(\$278,668)</b>
Funded Percentage		<b>157%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

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

**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Broken Arrow, Oklahoma**

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	6	\$226,594
Survivors	6	284,066
Disabled	1	24,688
Deferred Vested	<u>0</u>	<u>0</u>
Totals	13	<b>\$535,348</b>
Market Value of Assets		<b>\$1,856,874</b>
Deficiency (Surplus)		<b>(\$1,321,526)</b>
Funded Percentage		<b>347%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65



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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	2	\$20,682
Survivors	0	0
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	2	<b>\$20,682</b>
Market Value of Assets		<b>\$26,030</b>
Deficiency (Surplus)		<b>(\$5,348)</b>
Funded Percentage		<b>126%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	3	\$211,208
Survivors	0	0
Disabled	1	8,410
Deferred Vested	<u>0</u>	<u>0</u>
Totals	4	<b>\$219,618</b>
Market Value of Assets		<b>\$28,311</b>
Deficiency (Surplus)		<b>\$191,307</b>
Funded Percentage		<b>13%</b>

***Plan assets are not currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 9 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>\$29,991</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	4	\$49,543
Survivors	0	0
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	4	<b>\$49,543</b>
Market Value of Assets		<b>\$171,728</b>
Deficiency (Surplus)		<b>(\$122,185)</b>
Funded Percentage		<b>347%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	3	\$154,386
Survivors	1	29,695
Disabled	0	0
Deferred Vested	<u>1</u>	<u>12,348</u>
Totals	5	<b>\$196,429</b>
Market Value of Assets		<b>\$434,821</b>
Deficiency (Surplus)		<b>(\$238,392)</b>
Funded Percentage		<b>221%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

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

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	30	\$96,834
Survivors	4	5,822
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	34	<b>\$102,656</b>
Market Value of Assets		<b>\$61,265</b>
Deficiency (Surplus)		<b>\$41,391</b>
Funded Percentage		<b>60%</b>

***Plan assets are not currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 3 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>\$15,917</b>
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**Actuarial Basis**

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

**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Norman, Oklahoma**

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	21	\$1,433,129
Survivors	1	44,435
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	22	<b>\$1,477,564</b>
Market Value of Assets		<b>\$1,234,975</b>
Deficiency (Surplus)		<b>\$242,589</b>
Funded Percentage		<b>84%</b>

***Plan assets are not currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>\$35,342</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	0	\$0
Survivors	1	34,655
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	1	<b>\$34,655</b>
Market Value of Assets		<b>\$49,471</b>
Deficiency (Surplus)		<b>(\$14,816)</b>
Funded Percentage		<b>143%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Skiatook, Oklahoma**

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	4	\$121,269
Survivors	3	108,429
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	7	<b>\$229,698</b>
Market Value of Assets		<b>\$237,102</b>
Deficiency (Surplus)		<b>(\$7,404)</b>
Funded Percentage		<b>103%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	2% per annum
Retirement Age for Deferred Vested	65



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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	15	\$513,026
Survivors	3	68,179
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	18	<b>\$581,205</b>
Market Value of Assets		<b>\$4,266,349</b>
Deficiency (Surplus)		<b>(\$3,685,144)</b>
Funded Percentage		<b>734%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

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

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	6	\$126,587
Survivors	0	0
Disabled	0	0
Deferred Vested	<u>0</u>	<u>0</u>
Totals	6	<b>\$126,587</b>
Market Value of Assets		<b>\$508,500</b>
Deficiency (Surplus)		<b>(\$381,913)</b>
Funded Percentage		<b>402%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

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

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

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	2	\$54,713
Survivors	0	0
Disabled	2	39,592
Deferred Vested	<u>2</u>	<u>30,977</u>
Totals	6	<b>\$125,282</b>
Market Value of Assets		<b>\$173,172</b>
Deficiency (Surplus)		<b>(\$47,890)</b>
Funded Percentage		<b>138%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing July 1, 2004 sufficient to amortize the funding deficiency	<b>N/A</b>
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**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Weatherford, Oklahoma**

**FUNDED STATUS OF THE PLAN AS OF JANUARY 1, 2004**

	<u>Count</u>	<u>Present Value of Benefits</u>
Retirees	4	\$234,367
Survivors	1	57,182
Disabled	0	0
Deferred Vested	<u>1</u>	<u>82,730</u>
Totals	6	<b>\$374,279</b>
Market Value of Assets		<b>\$542,630</b>
Deficiency (Surplus)		<b>(\$168,351)</b>
Funded Percentage		<b>145%</b>

***Plan assets are currently sufficient.***

***Plan Funding Requirement***

Annual contribution payable for 10 years commencing  
July 1, 2004 sufficient to amortize the funding deficiency **N/A**

**Actuarial Basis**

Interest rate	7.5 % per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	3% per annum
Retirement Age 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, 2004.

For 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 20% corridor of the market value, an additional market value adjustment is included to bring the actuarial value of assets within this corridor.
- The actuarial value of assets is equal to the preliminary actuarial value plus the market value adjustment.

For plans with only nonactive participants, 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, 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 account balances (accumulated employee contributions with interest) is subtracted from the actuarial value of assets to determine valuation assets.

Oklahoma Municipal Retirement Fund

Exhibit 4

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 1/1/02	Actuarial Value of Assets as of 1/1/02	Market Value of Assets as of 1/1/03	Actuarial Value of Assets as of 1/1/03	Contributions			Assumed Yield at Valuation Rate (7.5%)	Preliminary Actuarial Value	Market Value of Assets as of 1/1/04	Market Value Adjustment	Actuarial Value of Assets as of 1/1/04
					Employer	Employee	Distributions					
Adair	50,587	56,402	53,091	63,709	9,568	3,234	(5,637)	5,047	75,921	70,873	(1,262)	74,659
Altus	11,940,855	13,417,087	10,494,329	12,593,195	283,157	205,643	(739,750)	935,079	13,277,324	12,245,057	(258,067)	13,019,257
Alva	1,749,844	1,927,192	1,460,425	1,752,511	17,725	0	(19,883)	131,357	1,881,710	1,740,303	(35,352)	1,846,358
Antlers	271,712	304,563	262,545	315,053	22,291	11,137	(22,262)	24,048	350,267	325,202	(6,266)	344,001
Ardmore *	874,257	874,257	707,601	707,601	0	0	(68,908)	50,486	689,179	766,708	77,529	766,708
Bartlesville	1,718,544	1,921,264	1,938,887	2,326,665	520,003	0	(181,986)	187,175	2,851,856	2,687,783	(41,018)	2,810,838
Bethany *	10,966,070	12,852,879	9,864,189	11,837,027	399,220	124,489	(421,731)	891,601	12,830,605	11,877,684	(238,230)	12,592,375
Bethany/Warr Acres	956,205	1,074,170	865,439	1,038,526	25,047	8,188	0	79,136	1,150,897	1,070,275	(20,156)	1,130,741
Billings	51,473	59,446	47,947	57,536	5,170	2,322	(5,031)	4,407	64,403	59,898	(1,126)	63,277
Binger	12,418	13,854	14,587	17,504	3,598	1,343	0	1,498	23,943	22,879	(266)	23,677
Blackwell	4,374,243	4,965,526	3,607,392	4,328,871	45,900	47,551	(261,131)	318,377	4,479,568	4,111,798	(91,943)	4,387,625
Blair	59,104	65,971	61,990	74,387	6,478	3,279	(14,252)	5,411	75,303	69,187	(1,529)	73,774
Boise City	649,988	730,068	589,743	707,692	44,600	0	(26,018)	53,774	780,048	724,653	(13,849)	766,199
Braman	20,684	22,949	24,039	28,847	5,110	2,072	0	2,433	38,462	36,680	(445)	38,016
Bristow	834,667	939,017	807,354	968,825	86,448	27,309	(38,518)	75,483	1,119,547	1,046,247	(18,325)	1,101,222
Broken Arrow *	1,918,674	1,918,674	1,629,450	1,629,450	0	0	(78,109)	119,280	1,670,621	1,856,874	186,253	1,856,874
Broken Bow	722,745	807,292	715,915	859,098	81,535	30,545	(40,830)	67,104	997,451	933,008	(16,111)	981,340
Buffalo	836,778	941,060	740,993	889,192	16,027	11,499	(52,992)	65,734	929,460	856,036	(18,356)	911,104
Burns Flat	32,965	36,813	38,195	45,834	8,776	3,061	0	3,881	61,554	58,831	(681)	60,873
Calera	62,040	69,429	66,642	79,970	13,857	4,108	(6,950)	6,411	97,396	91,988	(1,352)	96,044
Central Okla Master Cc	495,818	556,901	457,705	549,246	34,299	12,514	(44,159)	41,293	593,192	548,315	(11,219)	581,973
Chandler	651,904	732,178	489,239	587,087	37,331	23,889	(23,406)	45,449	670,349	625,986	(11,091)	659,258
Checotah	0	0	52,569	53,592	93,783	30,101	(4,685)	8,489	181,282	196,497	3,804	185,086
Chickasha	9,941,932	11,178,712	8,600,756	10,320,907	0	45,975	(239,543)	766,809	10,894,148	10,048,256	(211,473)	10,682,675
Chouteau *	29,325	29,325	24,017	24,017	0	0	(2,336)	1,714	23,394	26,030	2,636	26,030
Claremore	7,282,299	8,064,734	6,910,011	8,292,013	595,118	205,498	(630,307)	628,288	9,090,609	8,441,482	(162,282)	8,926,327
Cleo Springs	34,370	38,436	35,348	42,417	5,080	762	0	3,400	51,659	48,750	(727)	50,932



Oklahoma Municipal Retirement Fund

Exhibit 4

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 1/1/02	Actuarial Value of Assets as of 1/1/02	Market Value of Assets as of 1/1/03	Actuarial Value of Assets as of 1/1/03	Contributions			Assumed Yield at Valuation Rate (7.5%)	Preliminary Actuarial Value	Market Value of Assets as of 1/1/04	Market Value Adjustment	Actuarial Value of Assets as of 1/1/04
					Employer	Employee	Distributions					
Cleveland	1,173,124	1,321,017	1,015,912	1,219,094	41,639	0	(60,080)	90,741	1,291,394	1,190,884	(25,127)	1,266,267
Clinton	6,943,811	7,827,938	5,932,867	7,119,440	0	78,296	(282,490)	526,301	7,441,547	6,851,941	(147,402)	7,294,146
Collinsville	1,543,960	1,705,098	1,340,759	1,608,911	62,502	24,480	(64,114)	121,526	1,753,305	1,625,759	(31,887)	1,721,419
Comanche *	0	0	55,000	55,000	0	0	(33,030)	2,886	24,856	28,311	3,455	28,311
Cordell	2,770,184	3,118,557	2,409,776	2,891,731	63,565	0	(77,915)	216,342	3,093,723	2,861,024	(58,175)	3,035,548
Cushing	7,737,073	8,701,459	6,830,253	8,196,303	366,749	0	(434,040)	612,199	8,741,213	8,073,933	(166,820)	8,574,393
Davis	722,409	809,408	635,576	762,692	39,865	27,765	(91,628)	56,302	794,996	724,725	(17,568)	777,428
Del City *	11,327,663	12,976,568	9,681,611	11,617,933	132,505	8,116	(297,089)	865,477	12,326,942	11,376,246	(237,674)	12,089,268
Dewey	1,132,415	1,274,055	959,904	1,151,884	0	13,513	(68,595)	84,326	1,181,128	1,082,863	(24,566)	1,156,562
Dumright	979,352	1,103,150	864,548	1,037,458	57,225	27,759	(91,296)	77,573	1,108,718	1,022,063	(21,664)	1,087,054
Durant	9,308,894	10,478,536	8,018,355	9,622,026	143,493	0	(338,260)	714,348	10,141,607	9,346,590	(198,754)	9,942,853
Eufaula	454,190	510,967	430,819	516,983	29,687	19,194	(30,727)	39,455	574,592	534,563	(10,007)	564,565
Fairfax *	177,449	177,449	150,737	150,737	0	0	(7,276)	11,032	154,494	171,728	17,234	171,728
Fairview *	475,860	475,860	393,011	393,011	0	0	(30,129)	28,346	391,228	434,821	43,593	434,821
Fort Cobb	0	0	588	605	5,945	3,500	0	400	10,450	11,075	156	10,606
Foss Reservoir Public \	350,400	393,031	316,311	379,573	12,423	5,984	(10,139)	28,778	416,620	386,644	(7,494)	409,126
Frederick	1,254,674	1,405,587	1,186,969	1,424,363	127,061	42,320	(73,586)	110,420	1,630,578	1,521,521	(27,264)	1,603,314
Garber	5,083	5,268	9,144	10,349	2,872	1,288	0	932	15,441	15,539	24	15,466
Geary	435,403	482,731	358,243	429,892	12,118	5,204	(21,575)	32,082	457,721	422,301	(8,855)	448,866
Gore and Gore PWA	0	0	1,579	1,624	10,642	9,042	(743)	832	21,397	22,407	252	21,649
Granite	685,472	771,247	580,226	696,271	11,723	9,526	(27,754)	51,976	741,742	685,156	(14,146)	727,596
Guthrie	3,099,862	3,447,413	2,764,682	3,317,619	15,455	60,750	(219,323)	243,454	3,417,954	3,152,311	(66,411)	3,351,544
Guymon	2,959,227	3,313,767	2,713,132	3,255,759	196,983	0	(34,777)	250,265	3,668,230	3,420,441	(61,947)	3,606,283
Harrah	437,398	491,674	419,218	503,062	42,959	18,725	(18,497)	39,349	585,598	548,417	(9,295)	576,303
Heraldton	481,282	539,954	431,058	517,270	24,966	18,460	(13,881)	39,903	586,718	546,901	(9,954)	576,764
Henryetta	1,889,519	2,138,141	1,644,139	1,972,967	52,033	6,215	(125,150)	145,464	2,051,529	1,885,716	(41,453)	2,010,076
Hooker	117,564	130,905	130,167	156,201	25,010	8,337	(9,720)	12,601	192,428	181,310	(2,780)	189,649

Oklahoma Municipal Retirement Fund

Exhibit 4

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 1/1/02	Actuarial Value of Assets as of 1/1/02	Market Value of Assets as of 1/1/03	Actuarial Value of Assets as of 1/1/03	Contributions			Assumed Yield at Valuation Rate (7.5%)	Preliminary Actuarial Value	Market Value of Assets as of 1/1/04	Market Value Adjustment	Actuarial Value of Assets as of 1/1/04
					Employer	Employee	Distributions					
Hubert	8,878	8,970	28,669	31,424	16,895	4,950	(2,280)	3,090	54,080	55,468	347	54,427
Hydro	183,628	206,573	162,477	194,972	6,226	3,695	(14,251)	14,461	205,102	188,879	(4,056)	201,047
Kansas	16,115	17,805	19,128	22,954	3,332	910	(2,006)	1,805	26,996	25,446	(387)	26,608
Kingston	151,164	169,795	149,970	179,964	16,104	5,180	(1,072)	14,255	214,430	201,564	(3,217)	211,214
Krebs & Krebs Utility A	40,384	43,609	48,392	57,618	14,725	6,675	(12,186)	4,667	71,498	67,678	(955)	70,543
Laverne	538,527	601,613	476,642	571,971	23,289	14,022	(31,967)	43,097	620,392	575,259	(11,283)	609,109
Lindsay	2,543,608	2,864,042	2,269,352	2,723,222	75,992	31,996	(122,474)	203,698	2,912,435	2,693,427	(54,752)	2,857,683
Madill	1,037,050	1,168,250	904,581	1,085,497	24,527	25,271	(52,361)	81,316	1,164,250	1,076,042	(22,052)	1,142,198
Mannford	1,138,584	1,282,846	1,056,856	1,268,230	99,560	43,341	(108,828)	96,395	1,398,699	1,300,642	(24,514)	1,374,184
Marietta	676,183	761,529	602,581	723,098	7,724	15,647	(69,292)	52,510	729,688	668,856	(15,208)	714,480
Marietta PWA	366,615	411,178	325,670	390,804	14,408	7,713	(27,597)	29,105	414,433	383,058	(7,844)	406,589
McLoud	132,811	148,348	129,398	155,278	16,353	6,061	(14,463)	11,944	175,173	163,391	(2,946)	172,228
Medford *	846,675	969,161	736,703	884,043	41,465	5,118	(49,318)	66,201	947,509	875,235	(18,068)	929,440
Meeker	212,894	237,546	189,431	227,317	2,713	6,574	(12,062)	16,945	241,487	222,328	(4,790)	236,697
Mooreland	606,812	685,055	531,911	638,293	5,355	1,921	(15,640)	47,558	677,487	625,481	(13,001)	664,486
Mountain Park Master (	322,446	362,413	285,812	342,975	5,178	3,444	(4,020)	25,896	373,473	346,142	(6,833)	366,640
Muldrow	407,933	458,790	396,461	475,754	28,567	20,814	(11,957)	37,085	550,262	515,128	(8,784)	541,478
Muskogee *	54,721	54,721	47,728	47,728	24,188	0	(19,806)	3,744	55,854	61,265	5,410	61,265
Mustang **	1,036,414	1,193,144	985,434	1,182,521	119,601	62,686	(50,189)	99,886	1,414,506	1,325,425	(22,270)	1,392,235
Newkirk	943,315	1,061,809	832,608	999,130	41,882	18,387	(68,489)	74,627	1,065,537	983,629	(20,477)	1,045,060
Nichols Hills *	3,946,077	4,595,781	3,421,710	4,106,052	68,643	55,176	(878,171)	279,666	3,631,366	3,278,504	(88,215)	3,543,150
Noble	554,970	619,495	515,770	618,924	31,295	12,861	(122,290)	43,489	584,279	528,631	(13,912)	570,367
Norman *	1,547,003	1,547,003	1,210,693	1,210,693	0	0	(185,973)	83,828	1,108,548	1,234,975	126,427	1,234,975
Nowata	926,002	1,042,793	797,728	957,274	12,869	23,028	(71,645)	70,455	991,981	909,883	(20,524)	971,457
Oilton	135,759	152,470	120,325	144,390	2,942	4,930	(8,728)	10,797	154,331	142,552	(2,945)	151,386
Okeene	442,984	498,352	375,443	450,532	2,824	5,229	(25,908)	33,120	465,798	427,883	(9,479)	456,319
Okemah	190,311	211,378	189,971	227,965	13,936	8,807	(12,940)	17,465	255,233	238,103	(4,283)	250,951

DEAN & COMPANY

D3

Oklahoma Municipal Retirement Fund

Exhibit 4

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 1/1/02	Actuarial Value of Assets as of 1/1/02	Market Value of Assets as of 1/1/03	Actuarial Value of Assets as of 1/1/03	Contributions			Assumed Yield at Valuation Rate (7.5%)	Preliminary Actuarial Value	Market Value of Assets as of 1/1/04	Market Value Adjustment	Actuarial Value of Assets as of 1/1/04
					Employer	Employee	Distributions					
Oklahoma Municipal Le	3,131,353	3,327,021	2,792,124	3,350,549	83,041	0	(49,063)	252,565	3,637,092	3,371,250	(66,460)	3,570,632
Okmulgee	7,932,644	8,918,039	6,957,146	8,348,575	100,310	0	(187,115)	622,888	8,884,658	8,204,696	(169,991)	8,714,667
Owasso	3,169,078	3,558,663	2,978,443	3,574,131	220,525	133,764	(125,175)	276,652	4,079,897	3,806,698	(68,300)	4,011,597
Pawnee	977,720	1,099,303	843,503	1,012,204	24,122	24,176	(55,407)	75,649	1,080,744	997,974	(20,692)	1,060,051
Perkins	306,550	345,117	279,795	335,754	27,585	10,348	(25,343)	25,654	373,999	347,300	(6,675)	367,324
Perry	2,235,454	2,501,840	1,854,591	2,225,509	29,851	36,403	(51,746)	167,457	2,407,474	2,229,894	(44,395)	2,363,079
Pond Creek	306,919	344,921	281,544	337,853	19,846	6,982	(33,254)	25,098	356,524	328,672	(6,963)	349,561
Poteau	2,832,545	3,188,594	2,461,204	2,953,445	67,139	48,651	(154,287)	220,065	3,135,013	2,892,788	(60,556)	3,074,457
Prague *	54,744	54,744	45,168	45,168	0	0	(3,937)	3,240	44,471	49,471	5,000	49,471
Ringling	79,304	89,110	71,671	86,005	3,975	2,230	(3,554)	6,550	95,207	88,437	(1,692)	93,514
Sallisaw	5,319,534	5,979,638	4,842,232	5,810,679	307,824	131,926	(302,929)	440,932	6,388,432	5,928,530	(114,975)	6,273,456
Selling	418,682	471,169	372,234	446,681	20,721	14,222	(26,383)	33,822	489,064	453,545	(8,880)	480,184
Shawnee *	20,793,837	23,975,095	17,733,894	21,280,673	384,168	0	(712,300)	1,583,746	22,536,286	20,795,323	(435,241)	22,101,045
Skiatook *	291,805	291,805	224,027	224,027	0	0	(26,752)	15,799	213,075	237,102	24,027	237,102
Spencer *	707,838	818,304	597,774	717,329	12,923	9,034	(52,486)	52,655	739,455	678,972	(15,121)	724,334
Spiro	386,608	433,666	368,677	442,413	27,784	13,112	(17,910)	34,043	499,442	466,418	(8,256)	491,186
Stillwater *	4,289,704	4,289,704	3,686,272	3,686,272	0	0	(118,939)	272,010	3,839,344	4,266,349	427,006	4,266,349
Stillwater Medical Cent	530,288	530,288	447,477	447,477	0	0	(22,716)	32,709	457,470	508,500	51,030	508,500
Stillwell	953,591	1,061,863	1,029,061	1,234,873	176,451	60,636	(27,161)	100,488	1,545,288	1,463,155	(20,533)	1,524,755
Stratford	30,644	34,235	35,698	42,837	8,440	4,579	(3,078)	3,586	56,365	53,986	(595)	55,770
Stroud	1,887,712	2,125,573	1,663,576	1,996,291	46,662	35,641	(109,649)	148,696	2,117,641	1,953,962	(40,920)	2,076,721
Sulphur	1,407,376	1,561,974	1,277,169	1,532,603	53,201	33,322	(56,184)	116,083	1,679,026	1,559,987	(29,760)	1,649,266
Talihna & TPWA	0	0	22,705	23,665	28,936	7,614	0	3,145	63,360	67,826	1,117	64,476
Tecumseh *	1,148,679	1,291,779	155,603	155,603	0	0	(11,135)	11,253	155,720	173,172	17,452	173,172
Thomas	480,516	539,501	429,950	515,940	14,930	9,548	(23,096)	38,747	556,069	514,083	(10,497)	545,572
Tipton	8,651	8,926	13,934	15,806	6,216	1,865	(3,369)	1,362	21,880	22,039	40	21,920
Tonkawa	1,504,686	1,694,803	1,307,497	1,568,996	30,240	16,502	(73,461)	116,673	1,658,950	1,530,085	(32,216)	1,626,733

Oklahoma Municipal Retirement Fund

Exhibit 4

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 1/1/02	Actuarial Value of Assets as of 1/1/02	Market Value of Assets as of 1/1/03	Actuarial Value of Assets as of 1/1/03	Contributions			Assumed Yield at Valuation Rate (7.5%)	Preliminary Actuarial Value	Market Value of Assets as of 1/1/04	Market Value Adjustment	Actuarial Value of Assets as of 1/1/04
					Employer	Employee	Distributions					
Velma	42,324	47,656	41,682	50,019	4,542	1,980	0	3,996	60,537	56,985	(888)	59,649
Vian	30,669	33,641	30,371	36,445	5,739	2,090	(2,868)	2,919	44,305	41,782	(631)	43,674
Vinita	3,507,661	3,940,396	3,125,955	3,751,146	190,411	98,435	(139,762)	286,927	4,187,157	3,897,760	(72,349)	4,114,808
Wakita	32,681	36,143	38,315	45,978	7,831	1,642	0	3,804	59,255	56,339	(729)	58,526
Warr Acres	3,782,067	4,256,242	3,270,742	3,924,891	15,370	22,793	(155,956)	289,950	4,097,047	3,771,863	(81,296)	4,015,751
Watonga	2,836,558	3,192,761	2,442,593	2,931,112	120,428	31,524	(238,911)	216,572	3,060,725	2,814,219	(61,627)	2,999,096
Waukomis	280,735	315,393	226,748	272,097	5,908	6,448	(9,758)	20,505	295,201	273,635	(5,391)	289,809
Waurika	507,036	567,256	444,829	533,795	11,088	6,841	(13,624)	40,196	578,296	535,113	(10,796)	567,500
Weatherford *	576,558	576,558	483,930	483,930	0	0	(31,042)	35,131	488,018	542,630	54,612	542,630
Webbers Falls	0	0	6,625	6,860	8,736	4,203	(1,327)	950	19,422	20,802	345	19,767
Wellston	161,549	181,005	155,946	187,136	10,754	6,307	(15,017)	14,112	203,291	187,263	(4,007)	199,284
Westville Utility Authori	64,171	71,068	63,419	76,103	8,141	2,918	(9,622)	5,762	83,301	77,555	(1,437)	81,865
Wetumka	431,531	483,323	435,612	522,734	60,217	15,764	(33,134)	40,812	606,393	567,545	(9,712)	596,681
Yale	1,055,040	1,188,547	842,678	1,011,214	31,406	8,212	(34,888)	76,018	1,091,963	1,009,574	(20,597)	1,071,366
Yukon	6,853,592	7,706,337	6,076,606	7,291,927	479,859	0	(484,290)	546,728	7,834,224	7,240,374	(148,462)	7,685,761
<b>Total</b>	<b>213,360,281</b>	<b>239,724,249</b>	<b>187,105,454</b>	<b>222,654,896</b>	<b>7,213,455</b>	<b>2,397,141</b>	<b>(10,832,814)</b>	<b>16,659,527</b>	<b>238,092,204</b>	<b>221,910,998</b>	<b>(3,264,054)</b>	<b>234,826,150</b>

\* Nonactive only city; the Actuarial Value of Assets is equal to the Market Value

\*\* Hybrid city; employee account balances are subtracted from the Actuarial Value of Assets to determine the Valuation Assets

\*\*\* Mustang assumes 8.00% yield on investments

# **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.

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

<b>Eligibility</b>	All regular, full-time employees of a participating employer except police, firefighters and other employees covered under a state system.
<b>Service</b>	
Credited service	The last period of continuous employment with the employer excluding any periods before the effective date of the plan specified in the adoption agreement.
Vesting	Credited service plus transferred service from other OMRF employers.
<b>Service requirement for benefit eligibility</b>	5, 7 or 10 years of vesting service, as specified in the adoption agreement.
<b>Normal Retirement and Unreduced Early Retirement Ages</b>	<p>Age 65 with service requirement fulfilled.</p> <p>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.</p> <p>Also if specified in the adoption agreement, an employee may receive unreduced benefits 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.</p> <p>Four cities have adopted special retirement provisions not provided in the standard adoption agreements:</p> <ul style="list-style-type: none"><li>▪ For employees of Cushing, normal retirement age is 60 with 10 years of service.</li><li>▪ Normal retirement age for an employee of Altus with 25 years of vesting service may be as early as age 62.</li><li>▪ An employee of Warr Acres may receive unreduced benefits when the sum of an employee's age in years and number of years of credited service equals 75 or more.</li><li>▪ For employees of Del City, normal retirement age is 60 with 7 years of service. Employees with 20 years of vesting service may also receive unreduced benefits as early as age 55.</li></ul>
<b>Normal Retirement and Unreduced Early Retirement Benefits</b>	<p>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:</p> <ul style="list-style-type: none"><li>- Plan AAA 3.000%</li><li>- Plan AA 2.625%</li><li>- Plan BB 2.250%</li><li>- Plan CC 1.875%</li><li>- Plan A 1.500%</li><li>- Plan B 1.125%</li><li>- Plan C 0.750%</li></ul>

Final average compensation is the average of the five highest consecutive annual salaries out to the last 10 calendar years of service.



## Oklahoma Municipal Retirement Fund

### Summary of Plan Provisions

<b>Employee contributions</b>	As specified in the adoption agreement. The options that may be elected are the standard contribution rate, a fixed amount which is less than the standard contribution rate, a fixed percentage of the total contribution rate determined each year, or no employee contributions. The standard contribution rates are: <ul style="list-style-type: none"><li>- Plan AAA 6.00%</li><li>- Plan AA 5.25%</li><li>- Plan BB 4.50%</li><li>- Plan CC 3.75%</li><li>- Plan A 3.00%</li><li>- Plan B 2.25%</li><li>- Plan C 1.50%</li></ul>
<b>Early Retirement</b>	
Eligibility	Age 55 with service requirement fulfilled.
Benefit	The accrued benefit payable starting at age 65, or an actuarially reduced benefit starting at early retirement age.
<b>Late Retirement</b>	The accrued benefit based on pay and service to actual retirement.
<b>Termination of Service</b>	
Vesting requirement	Fulfillment of the service requirement
Before vesting	Return of member contributions with interest.
After vesting	The accrued benefit payable starting at age 65, or an actuarially reduced benefit starting at early retirement age.
<b>Disability Retirement</b>	
Eligibility	Total and permanent disability.
Benefit	The accrued benefit is payable upon disablement without reduction for early payment.
<b>In-service Death</b>	
Before vesting	Return of member contributions with interest.
After vesting	If the participant is married at the time of death, 50% of the accrued benefit is payable to the spouse until death or remarriage. Otherwise, 50% of the accrued benefit is payable to the designated beneficiary for 60 months.
<b>Payment Options</b>	
Normal form	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.

## Oklahoma Municipal Retirement Fund

### Summary of Plan Provisions

Optional forms	Other annuity forms available on an actuarial equivalent basis are: <ul style="list-style-type: none"><li>- Joint and 50% survivor annuity</li><li>- Joint and 66-2/3rds last survivor annuity</li><li>- Joint and 100% survivor annuity</li></ul>
<b>Cost of Living Option</b>	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% (2% for employees of Skiatook).
<b>Hybrid Option</b>	If specified in the adoption agreement, employee 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 participants 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 participants 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.

Oklahoma Municipal Retirement Fund

SUMMARY OF ACTUARIAL ASSUMPTIONS

Interest Rates	Purpose	Rate	Age	Rates per Thousand					Annual Pay Increase	
				Mortality (M)	Mortality (F)	Turnover	Disability	Retire-S		Retire-U
<b>Mortality Tables</b>			20	0.545	0.305	214.60	0.80	0	0	7.42%
Basic valuation			21	0.570	0.308	197.80	0.85	0	0	7.19%
Before retirement 7.50%			22	0.598	0.311	182.30	0.91	0	0	6.97%
After retirement 7.50%			23	0.633	0.313	167.90	0.96	0	0	6.77%
			24	0.671	0.313	154.60	1.01	0	0	6.59%
			25	0.711	0.313	142.30	1.07	0	0	6.42%
UP 1994			26	0.749	0.316	131.10	1.15	0	0	6.26%
After retirement			27	0.782	0.324	120.90	1.23	0	0	6.12%
with projected mortality improvement			28	0.811	0.338	111.60	1.31	0	0	6.00%
			29	0.838	0.356	103.20	1.39	0	0	5.88%
<b>Pay Increase Assumption</b>			30	0.862	0.377	95.60	1.47	0	0	5.77%
Annual rates of pay increase			31	0.883	0.401	88.70	1.60	0	0	5.68%
as shown			32	0.902	0.427	82.70	1.73	0	0	5.59%
			33	0.912	0.454	77.30	1.87	0	0	5.52%
<b>Turnover</b>			34	0.913	0.482	72.50	2.00	0	0	5.45%
Select and ultimate rates			35	0.915	0.514	68.40	2.13	0	0	5.39%
Ultimate rates are age-related as shown			36	0.927	0.550	64.80	2.40	0	0	5.33%
Additional rates per thousand are			37	0.958	0.593	61.70	2.67	0	0	5.28%
added during the first 5 years:			38	1.010	0.643	59.10	2.93	0	0	5.24%
Year 1: 165			39	1.075	0.701	56.90	3.20	0	0	5.20%
Year 2: 105			40	1.153	0.763	55.00	3.47	0	0	5.16%
Year 3: 65			41	1.243	0.826	53.50	3.97	0	0	5.13%
Year 4: 45			42	1.346	0.888	52.30	4.48	0	0	5.09%
Year 5: 35			43	1.454	0.943	51.30	4.99	0	0	5.06%
<b>Retirement Age</b>			44	1.568	0.992	50.40	5.49	0	0	5.03%
Select (S) and ultimate (U) rates			45	1.697	1.046	49.80	6.00	0	0	5.00%
Select rate applies only at employee's			46	1.852	1.111	49.20	6.00	0	0	4.96%
normal retirement age.			47	2.042	1.196	48.60	6.00	0	0	4.93%
Ultimate rates apply at all other ages			48	2.260	1.297	48.00	6.00	0	0	4.89%
only if the employee is eligible to retire.			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%
<b>Other Assumptions</b>			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	300	50	4.46%
			56	5.322	2.755	37.90	11.23	300	50	4.37%
			57	6.001	3.139	35.20	12.45	300	50	4.27%
			58	6.774	3.612	32.10	13.68	300	50	4.16%
			59	7.623	4.154	28.40	14.91	300	50	4.04%
			60	8.576	4.773	24.20	16.13	300	50	3.90%
			61	9.663	5.476	19.40	16.13	300	50	3.75%
			62	10.944	6.271	13.90	16.13	600	300	3.59%
			63	12.335	7.179	7.70	16.13	600	150	3.41%
			64	13.914	8.194	0.80	16.13	600	150	3.21%
			65	15.629	9.286	0.00	0.00	1000	1000	3.00%

Base mortality rates are shown; valuation rates are projected for mortality improvement by the Society of Actuaries' table AA based on the employee's year of birth.

**F**

**Summary of  
Plan Participants**



## **F Summary of Plan Participants**

The first exhibit in this section shows the age and service distribution, along with average valuation pay, for active participants as of January 1, 2004 (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 second exhibit in this section shows the age distribution and average benefit for each category of nonactive participant as of January 1, 2004 (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.



Oklahoma Municipal Retirement Fund  
All Cities Combined  
**AGE AND SERVICE OF ACTIVE PARTICIPANTS**  
January 1, 2004

Age Group	Years of Service														All Service	
	0 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 49		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	16	16,907													16	16,907
20 - 24	168	19,635	1	20,760											170	19,614
25 - 29	229	21,559	51	25,022	2	26,892									282	22,223
30 - 34	242	22,169	74	24,868	30	29,123									346	23,349
35 - 39	220	21,855	94	26,186	62	29,072	31	32,486	3	26,336					410	24,776
40 - 44	218	23,192	128	26,635	81	30,818	75	31,361	51	29,687	3	40,187			557	26,853
45 - 49	210	23,524	114	26,331	89	29,844	85	30,153	55	33,008	30	32,374	1	29,840	585	27,331
50 - 54	140	23,580	89	26,340	70	28,207	99	34,192	54	34,516	27	33,862	20	34,377	499	28,999
55 - 59	96	24,528	76	28,116	66	30,024	61	30,786	44	31,961	17	34,503	12	35,662	372	28,956
60 - 64	46	24,001	38	28,412	27	29,435	32	29,795	26	32,649	14	28,474	20	36,047	203	29,065
65 - 69	13	26,370	13	25,634	14	27,976	5	30,758	8	29,471	4	35,432	6	30,140	63	28,665
70 - 109	3	9,890	3	14,988	7	18,122	3	25,832	2	20,132	3	17,870	3	30,716	24	19,375
<b>All Ages</b>	<b>1,601</b>	<b>22,382</b>	<b>681</b>	<b>26,356</b>	<b>448</b>	<b>29,356</b>	<b>391</b>	<b>31,636</b>	<b>243</b>	<b>32,113</b>	<b>98</b>	<b>32,516</b>	<b>62</b>	<b>34,504</b>	<b>3,527</b>	<b>26,217</b>

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 annualized pay for 2003

**Oklahoma Municipal Retirement Fund  
All Cities Combined  
SUMMARY OF NONACTIVE PARTICIPANTS**

January 1, 2004

Age Group	Males			Females			Total		
	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age
<b>Retired Participants in Payment Status</b>									
40 - 49	3	6,690	54.48	1	29,851	51.12	4	36,541	51.73
50 - 54	36	313,297	58.17	12	101,044	58.26	48	414,342	58.19
60 - 64	95	893,338	62.81	41	347,820	62.87	136	1,241,157	62.83
65 - 69	127	1,053,010	67.39	51	452,445	67.44	178	1,505,456	67.40
70 - 74	112	911,928	72.38	45	391,093	72.46	157	1,303,020	72.41
75 - 79	93	704,468	77.27	35	288,810	76.95	128	993,278	77.17
80 - 84	61	356,440	82.31	33	140,019	82.89	94	496,458	82.47
85 - 89	32	154,449	87.18	19	59,874	86.67	51	214,323	87.04
90 - 110	18	58,469	93.96	10	30,548	92.04	28	89,018	93.30
<b>Totals</b>	<b>577</b>	<b>4,452,090</b>	<b>70.62</b>	<b>247</b>	<b>1,841,503</b>	<b>70.57</b>	<b>824</b>	<b>6,293,593.68</b>	<b>70.60</b>
<b>Ave amount</b>		<b>7,715.93</b>			<b>7,455.48</b>			<b>7,637.86</b>	
<b>Survivors in Payment Status</b>									
20 - 29	1	1,704	21.23				1	1,704	21.23
30 - 39	3	16,071	38.15	4	24,394	36.22	7	40,465	36.99
40 - 49	2	10,162	40.65	9	40,100	45.77	11	50,262	44.73
50 - 54	2	14,468	51.56	4	12,456	53.78	6	26,923	52.58
55 - 59	2	18,183	59.04	17	88,054	57.23	19	106,237	57.54
60 - 64				17	50,961	62.79	17	50,961	62.79
65 - 69				18	78,253	67.83	18	78,253	67.83
70 - 74	4	24,888	73.21	8	36,440	73.64	12	61,329	73.47
75 - 79				29	151,469	77.33	29	151,469	77.33
80 - 84				19	63,292	82.42	19	63,292	82.42
85 - 89	1	2,545	86.89	6	15,735	86.70	7	18,279	86.73
90 - 110				5	16,764	93.84	5	16,764	93.84
<b>Totals</b>	<b>15</b>	<b>88,020</b>	<b>55.95</b>	<b>136</b>	<b>577,917</b>	<b>68.33</b>	<b>151</b>	<b>665,937.00</b>	<b>66.69</b>
<b>Ave amount</b>		<b>5,867.98</b>			<b>4,249.39</b>			<b>4,410.18</b>	
<b>Disabled Participants</b>									
20 - 29									
30 - 39									
40 - 49	17	114,264	46.73				17	114,264	46.73
50 - 54	24	140,655	52.32	4	32,355	51.97	28	173,009	52.25
55 - 59	26	211,473	57.31	3	53,161	56.35	29	264,634	57.12
60 - 64	29	192,353	62.42	5	31,255	62.55	34	223,607	62.44
65 - 69	18	144,634	68.09	5	53,828	67.25	23	198,462	67.86
70 - 74	17	117,349	72.24	2	12,417	73.95	19	129,766	72.40
75 - 79	2	17,608	75.86	3	14,950	76.40	5	32,558	76.11
80 - 84	3	16,270	81.72				3	16,270	81.72
85 - 89	1	3,141	85.21	2	11,804	85.60	3	14,946	85.52
90 - 110									
<b>Totals</b>	<b>137</b>	<b>957,749</b>	<b>60.64</b>	<b>24</b>	<b>209,769</b>	<b>63.51</b>	<b>161</b>	<b>1,167,517.32</b>	<b>61.16</b>
<b>Ave amount</b>		<b>6,990.87</b>			<b>8,740.37</b>			<b>7,251.66</b>	
<b>Deferred Vested Former Employees</b>									
20 - 29				4	6,081	27.74	4	6,081	27.74
30 - 39	18	83,529	36.77	9	32,695	34.41	27	116,224	36.11
40 - 49	67	407,959	45.96	27	188,886	45.18	94	596,846	45.71
50 - 54	52	308,469	52.04	18	164,803	52.35	70	473,271	52.15
55 - 59	26	159,550	57.47	14	64,518	56.99	40	224,068	57.33
60 - 64	8	83,277	62.01	5	26,789	62.83	13	110,066	62.21
65 - 69	1	3,834	66.72	1	1,647	66.00	2	5,481	66.50
<b>Totals</b>	<b>173</b>	<b>1,048,380</b>	<b>50.17</b>	<b>80</b>	<b>490,887</b>	<b>49.53</b>	<b>253</b>	<b>1,539,267.96</b>	<b>49.96</b>
<b>Ave amount</b>		<b>6,060.00</b>			<b>6,136.09</b>			<b>6,084.06</b>	
<b>Grand Totals</b>	<b>902</b>	<b>6,546,239</b>	<b>65.69</b>	<b>487</b>	<b>3,120,077</b>	<b>66.37</b>	<b>1389</b>	<b>9,666,316</b>	<b>65.91</b>
<b>Ave amount</b>		<b>7,257.47</b>			<b>6,406.73</b>			<b>6,959.19</b>	

**G**

**Sample  
Actuarial Report**



## **G Sample Actuarial Report**

This section contains a copy of the 2004 Actuarial Valuation of Funding Requirements for the Employee Retirement System of Granite, Oklahoma. It is included as a sample of the valuation reports sent to member employers.

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**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Granite, Oklahoma**

**ACTUARIAL VALUATION OF FUNDING REQUIREMENTS**

**Effective for the Year Starting  
July 1, 2004**

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March 26, 2004

Prepared by

**DEAN & COMPANY**  
*CONSULTING ACTUARIES*  
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## INTRODUCTION

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

The purposes of the valuation are:

- to determine the required contribution for the retirement program effective July 1, 2004.
- to illustrate the increase in contributions that would be necessary to support the next benefit level available under the OMRF program.
- to provide accounting information required by GASB 25 (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 available benefit level.

The total contribution rate for the plan is separated between the employee-paid 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.

The actuarial value of assets (Exhibit 3) is related to market value, but smoothed to reduce the volatility of contribution requirements.

GASB Statement 25 requires the employer to record in its annual audit report the progress towards funding the retirement program (see Exhibit 4).

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

**Oklahoma Municipal Retirement System  
Employee Retirement System of Granite, Oklahoma**

**SUMMARY OF 2004-2005 PLAN CONTRIBUTION RATES**

	<u>Current</u>	<u>Next</u>	<u>Increase</u>
	<u>Plan</u>	<u>Plan Level</u>	
	<b>AA</b>	<b>AAA</b>	
Employee contribution rate as a percent of pay	4.00%	4.00%	0.00%
Municipality-required contribution rate as a percent of participant payroll	6.91%	11.89%	4.99%
<b>Total required contribution rate</b>	<b>10.91%</b>	<b>15.89%</b>	<b>4.99%</b>

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 (2003-2004) was 8.42% of participant payroll. The required contribution rate changes each year, reflecting the investments earnings of OMRF and the demographic experience of the participant group.

Since the employee contribution rate is fixed by the terms of the plan, the municipality-required 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.

**Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA**

**Special Note:**

Due to the plan's overfunded status, the funding requirement for the 2001-2002 year is less than the value of benefits accruing (15.57%, as measured by the entry age normal cost). Funding requirements may increase in the future as benefits accrue.



**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Granite, Oklahoma  
Development of Plan Contribution Requirement**

	<u>Current Plan</u>	<u>Next Plan Level</u>	<u>Increase</u>
	<u>AA</u>	<u>AAA</u>	
Actuarial liability (entry age normal method)			
Retired, survivors and deferred vested (2)	\$ 340,705	\$ 340,705	\$ -
Active employees (9)	<u>313,365</u>	<u>356,935</u>	<u>\$ 43,570</u>
Total	\$ 654,070	\$ 697,640	\$ 43,570
Assets (actuarial value as of 1-1-2004)	<u>727,596</u>	<u>727,596</u>	<u>0</u>
Unfunded actuarial liability (surplus)	\$ (73,526)	\$ (29,956)	\$ 43,570
Annual amount to amortize the unfunded actuarial liability (surplus) over the future working lifetime	\$ (10,260)	\$ (4,180)	\$ 6,080
Annual normal cost	<u>34,270</u>	<u>39,165</u>	<u>4,896</u>
Total annual cost	\$ 24,010	\$ 34,985	\$ 10,976
Valuation payroll as of 1-1-2004	\$ 220,151	\$ 220,151	
Required total contribution as a percent of payroll (effective 7-1-2004)	10.91%	15.89%	4.99%

*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:*

15.57%	17.79%	2.22%
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**Notes**

See Exhibit 3 for the development of the actuarial value of assets.

See Exhibits 7 and 8 for a description of the actuarial methods and assumptions used in the valuation.

See Exhibits 9 and 10 for a summary of the active participants and retirees.

The present value of benefits for non-active participants includes remaining balances of \$4,539 for 3 former employees not included in the deferred vested census.

**Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA**

**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Granite, Oklahoma**

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**

1	Market Value of Assets as of 1/1/03	\$580,226
2	Actuarial Value of Assets as of 1/1/03	\$696,271
	Percent of Market Value	120%
3	Contributions	
	Employer	11,723
	Employee	9,526
4	Distributions	(27,754)
5	Assumed Yield at Valuation Rate (7.50%)	51,976
6	Preliminary Actuarial Value	741,742
7	Market Value of Assets as of 1/1/04	685,158
8	Adjustment	
	25% of (7) minus (6)	(14,146)
9	Minimum Actuarial Value of Assets as of 1/1/04	
	80% of (7)	\$548,126
10	Maximum Actuarial Value of Assets as of 1/1/04	
	120% of (7)	\$822,189
11	Actuarial Value of Assets as of 1/1/04	<b>\$727,596</b>
	(6) plus (8), but not less than (9) nor more than (10)	
12	AAV as percent of Market Value	106%

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.

If the actuarial asset value would otherwise be outside a 20% corridor, it is instead equal to the relevant corridor limit.

Oklahoma Municipal Retirement Fund  
Employee Retirement System of Granite, Oklahoma

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Assets	Asset Valuation Basis	Actuarial Accrued Liability (AAL)*	Type*	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
1/1/1996	471,575	Market	444,694	PBO	(26,881)	106.0%	131,579	-20.4%
1/1/1997	511,173	Market	456,590	PBO	(54,583)	112.0%	126,234	-43.2%
1/1/1998	555,251	Actuarial	462,464	PBO	(92,787)	120.1%	132,217	-70.2%
1/1/1998	<b>555,251</b>	<b>Actuarial</b>	<b>500,931</b>	<b>EAN</b>	<b>(54,321)</b>	<b>110.8%</b>	<b>132,217</b>	<b>-41.1%</b>
1/1/1999	<b>646,854</b>	<b>Actuarial</b>	<b>485,182</b>	<b>EAN</b>	<b>(161,672)</b>	<b>133.3%</b>	<b>102,730</b>	<b>-157.4%</b>
1/1/2000	<b>732,566</b>	<b>Actuarial</b>	<b>493,392</b>	<b>EAN</b>	<b>(239,174)</b>	<b>148.5%</b>	<b>181,464</b>	<b>-131.8%</b>
1/1/2001	<b>762,521</b>	<b>Actuarial</b>	<b>496,268</b>	<b>EAN</b>	<b>(266,253)</b>	<b>153.7%</b>	<b>171,644</b>	<b>-155.1%</b>
1/1/2002	<b>771,247</b>	<b>Actuarial</b>	<b>606,668</b>	<b>EAN</b>	<b>(164,579)</b>	<b>127.1%</b>	<b>203,279</b>	<b>-81.0%</b>
1/1/2003	<b>696,271</b>	<b>Actuarial</b>	<b>593,647</b>	<b>EAN</b>	<b>(102,625)</b>	<b>117.3%</b>	<b>208,811</b>	<b>-49.1%</b>
1/1/2004	<b>727,596</b>	<b>Actuarial</b>	<b>654,070</b>	<b>EAN</b>	<b>(73,526)</b>	<b>111.2%</b>	<b>220,151</b>	<b>-33.4%</b>

\* The amounts shown for valuations prior to 1/1/98 are the pension benefit obligation (PBO) defined in GASB 5. GASB 25 which replaced GASB 5 requires that the actuarial liability used to fund the plan be used to measure funding progress.

GASB 25 results are shown in bold type. Both values are shown for 1/1/98 for comparative purposes.

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  
Employee Retirement System of Granite, Oklahoma**

**SUMMARY OF PLAN PROVISIONS**

<b>Eligibility</b>	All regular, full-time employees except police, firefighters and other employees who are covered under an approved system.
<b>Service</b>	
Credited service	The last period of continuous employment with the employer excluding any periods before the effective date of the plan specified in the adoption agreement.
Vesting	Credited service plus transferred service from other OMRF employers.
<b>Employee contributions</b>	4% of pay.
<b>Normal Retirement Age</b>	Age 65 with 10 or more years of vesting service
<b>Normal Retirement Benefit</b>	Plan AA 2.625% of final average compensation multiplied by the number of years of credited service.
<b>Early Retirement</b>	
Eligibility	Age 55 with 10 or more years of vesting service.
Benefit	The accrued benefit payable starting at age 65, or an actuarially reduced benefit starting at early retirement age.
<b>Late Retirement</b>	The accrued benefit based on pay and service to actual retirement.
<b>Termination of Service</b>	
Vesting	100% vested after 10 or more years of vesting service.
Before vesting	Return of member contributions with interest.
After vesting	The accrued benefit payable starting at age 65, or an actuarially reduced benefit starting at early retirement age.
<b>Disability Retirement</b>	
Eligibility	Total and permanent disability after 10 or more years of service.
Benefit	The accrued benefit is payable upon disablement without reduction for early payment.

**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Granite, Oklahoma**

**SUMMARY OF PLAN PROVISIONS**

**In-service Death**

- |                 |  |
|-----------------|--|
| Before vesting  | Return of member contributions with interest.                                  |
| Married, vested | 50% of the accrued benefit is payable to the spouse until death or remarriage. |
| Single, vested  | 50% of the accrued benefit is payable for 60 months certain.                   |

**Payment Options**

- |             |  |
|-------------|--|
| Normal form | The normal form of payment of the accrued benefit is a monthly lifetime annuity with 5 years certain.<br><br>Other annuity forms available (other than for disability retirement) on an actuarial equivalent basis are: <ul style="list-style-type: none"><li>- Joint and 50% survivor annuity</li><li>- Joint and 66-2/3rds last survivor annuity</li><li>- Joint and 100% survivor annuity</li></ul> |
|-------------|--|

**Cost of Living**

Benefits in payment status are adjusted each July 1st based on the percentage change in the CPI. The maximum increase is 3% per year.

## 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 Pay Level	Plan Level						
	C	B	A	CC	BB	AA	AAA
10,000	\$1,500	\$2,250	\$3,000	\$3,750	\$4,500	\$5,250	\$6,000
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	18,000
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 Pay Level	Plan Level						
	C	B	A	CC	BB	AA	AAA
10,000	\$3,000	\$4,500	\$6,000	\$7,500	\$9,000	\$10,500	\$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.

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 participants 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 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 ACTUARIAL ASSUMPTIONS**

Interest Rates	Purpose	Rate	Age	Rates per Thousand						Annual Pay Increase
				Mortality (M)	Mortality (F)	Turnover	Disability	Retire-S	Retire-U	
	Basic valuation		20	0.545	0.305	214.60	0.80	0	0	7.42%
	Before retirement	7.50%	21	0.570	0.308	197.80	0.85	0	0	7.19%
	After retirement	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%
			24	0.671	0.313	154.60	1.01	0	0	6.59%
	<b>Mortality Tables</b>		25	0.711	0.313	142.30	1.07	0	0	6.42%
	Before retirement	UP 1994	26	0.749	0.316	131.10	1.15	0	0	6.26%
	After retirement	UP 1994	27	0.782	0.324	120.90	1.23	0	0	6.12%
	with projected mortality improvement		28	0.811	0.338	111.60	1.31	0	0	6.00%
			29	0.838	0.356	103.20	1.39	0	0	5.88%
	<b>Pay Increase Assumption</b>		30	0.862	0.377	95.60	1.47	0	0	5.77%
	Annual rates of pay increase		31	0.883	0.401	88.70	1.60	0	0	5.68%
	as shown		32	0.902	0.427	82.70	1.73	0	0	5.59%
			33	0.912	0.454	77.30	1.87	0	0	5.52%
	<b>Turnover</b>		34	0.913	0.482	72.50	2.00	0	0	5.45%
	Select and ultimate rates		35	0.915	0.514	68.40	2.13	0	0	5.39%
	Ultimate rates are age-related as shown		36	0.927	0.550	64.80	2.40	0	0	5.33%
	Additional rates per thousand are		37	0.958	0.593	61.70	2.67	0	0	5.28%
	added during the first 5 years:		38	1.010	0.643	59.10	2.93	0	0	5.24%
	Year 1: 165		39	1.075	0.701	56.90	3.20	0	0	5.20%
	Year 2: 105		40	1.153	0.763	55.00	3.47	0	0	5.16%
	Year 3: 65		41	1.243	0.826	53.50	3.97	0	0	5.13%
	Year 4: 45		42	1.346	0.888	52.30	4.48	0	0	5.09%
	Year 5: 35		43	1.454	0.943	51.30	4.99	0	0	5.06%
	<b>Retirement Age</b>		44	1.568	0.992	50.40	5.49	0	0	5.03%
	Select (S) and ultimate (U) rates		45	1.697	1.046	49.80	6.00	0	0	5.00%
	Select rate applies only at employee's		46	1.852	1.111	49.20	6.00	0	0	4.96%
	normal retirement age.		47	2.042	1.196	48.60	6.00	0	0	4.93%
	Ultimate rates apply at all other ages		48	2.260	1.297	48.00	6.00	0	0	4.89%
	only if the employee is eligible to retire.		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%
	<b>Other Assumptions</b>		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	300	50	4.46%
			56	5.322	2.755	37.90	11.23	300	50	4.37%
			57	6.001	3.139	35.20	12.45	300	50	4.27%
			58	6.774	3.612	32.10	13.68	300	50	4.16%
			59	7.623	4.154	28.40	14.91	300	50	4.04%
			60	8.576	4.773	24.20	16.13	300	50	3.90%
			61	9.663	5.476	19.40	16.13	300	50	3.75%
			62	10.944	6.271	13.90	16.13	600	300	3.59%
			63	12.335	7.179	7.70	16.13	600	150	3.41%
			64	13.914	8.194	0.80	16.13	600	150	3.21%
			65	15.629	9.286	0.00	0.00	1000	1000	3.00%

Base mortality rates are shown; valuation rates are projected for mortality improvement by the Society of Actuaries' table AA based on the employee's year of birth.



Oklahoma Municipal Retirement Fund  
 Granite  
**AGE AND SERVICE OF ACTIVE PARTICIPANTS**  
 1/1/2004

Age Group	Years of Service														Ave Pay	
	0 - 4		5 - 9		10 - 14		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
15 - 19																
20 - 24																
25 - 29																
30 - 34	1	19,800													1	19,800
35 - 39																
40 - 44	1	24,468													1	24,468
45 - 49	2	25,950			1	24,170			1	27,338					4	25,852
50 - 54																
55 - 59	1	23,400													1	23,400
60 - 64	2	24,538													2	24,538
65 - 69																
70 - 109																
<b>All Ages</b>	<b>7</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>9</b>	

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  
Granite  
SUMMARY OF NONACTIVE PARTICIPANTS

January 1, 2004

Age Group	Males			Females			Total		
	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age
<b>Retired Participants in Payment Status</b>									
55 - 59									
60 - 64									
65 - 69				1	4,281	66.75	1	4,281	66.75
70 - 74	1	23,803	74.93				1	23,803	74.93
75 - 79									
80 - 84									
85 - 89									
90 - 110									
<b>Totals</b>	<b>1</b>	<b>23,803</b>	<b>74.93</b>	<b>1</b>	<b>4,281</b>	<b>66.75</b>	<b>2</b>	<b>28,083</b>	<b>73.68</b>
<b>Ave amount</b>		<b>23,802.60</b>			<b>4,280.76</b>			<b>14,041.68</b>	
<b>Survivors in Payment Status</b>									
20 - 29									
30 - 39									
40 - 49									
50 - 54									
55 - 59									
60 - 64									
65 - 69									
70 - 74									
75 - 79									
80 - 84									
85 - 89									
90 - 110									
<b>Totals</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	
<b>Ave amount</b>		<b>0.00</b>			<b>0.00</b>			<b>0.00</b>	
<b>Disabled Participants</b>									
20 - 29									
30 - 39									
40 - 49									
50 - 54									
55 - 59									
60 - 64									
65 - 69									
70 - 74									
75 - 79									
80 - 84									
85 - 89									
90 - 110									
<b>Totals</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	
<b>Ave amount</b>		<b>0.00</b>			<b>0.00</b>			<b>0.00</b>	
<b>Deferred Vested Former Employees</b>									
20 - 29									
30 - 39									
40 - 49									
50 - 54									
55 - 59									
60 - 64									
65 - 69									
<b>Totals</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	
<b>Ave amount</b>		<b>0.00</b>			<b>0.00</b>			<b>0.00</b>	
<b>Grand Totals</b>	<b>1</b>	<b>23,803</b>	<b>74.93</b>	<b>1</b>	<b>4,281</b>	<b>66.75</b>	<b>2</b>	<b>28,083</b>	<b>73.68</b>
<b>Ave amount</b>		<b>23,802.60</b>			<b>4,280.76</b>			<b>14,041.68</b>	

**H**

**Actuarial Report  
for the City of  
Bartlesville**

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

This section contains a copy of the 2004 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.

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**Oklahoma Municipal Retirement Fund  
Employee Retirement System of Bartlesville, Oklahoma**

**ACTUARIAL VALUATION OF FUNDING REQUIREMENTS**

**Effective for the Year Starting  
July 1, 2004**

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March 19, 2004

Prepared by

**DEAN & COMPANY**  
*CONSULTING ACTUARIES*  
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## 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, 2004.
- to provide accounting information required by GASB 25 (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.

GASB Statement 25 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.

*Benefits for service under the plan through 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**

	<u>Current Plan</u>
	<u>2% Career Ave</u>
Employee contribution rate as a percent of pay	0.00%
Municipality-required contribution rate as a percent of participant payroll	7.79%
<b>Total required contribution rate</b>	<b>7.79%</b>

**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	Unit Credit
Interest rate	7.5 % per annum
Pay Increases	Rates by age
Mortality	1994 Group Annuity Mortality (projected to 2004)
Retirement age	Rates by age
Turnover	Rates by age and service
Asset value	Actuarial method

The required contribution rate changes each year, reflecting the investments earnings of the OMRF fund and the demographic experience of the participant group.

**Plan 2% 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 Plan Contribution Requirement**

	<u>Current Plan</u>
	<u>2% Career Ave</u>
Actuarial liability (unit credit cost method)	
Retired, survivors and deferred vested	\$ 1,811,642
Active employees	<u>2,020,017</u>
Total	\$ 3,831,659
Assets (actuarial value as of 1-1-2004)	<u>2,810,838</u>
Unfunded actuarial liability	\$ 1,020,821
Annual amount to amortize the unfunded actuarial liability over 24 years	\$ 89,645
Annual normal cost	<u>355,812</u>
Total annual cost	\$ 445,457
Valuation payroll as of 1-1-2004	\$ 5,718,618
Required total contribution as a percent of payroll (effective 7-1-2004)	7.79%

## 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% 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 1/1/2003	\$1,938,887
2 Actuarial Value of Assets as of 1/1/2003	\$2,326,665
Percent of Market Value	120%
3 Contributions	
Employer	520,003
Employee	0
4 Distributions	(181,986)
5 Assumed Yield at Valuation Rate (7.50%)	<u>187,175</u>
6 Preliminary Actuarial Value	2,851,856
7 Market Value of Assets as of 1/1/2004	2,687,783
8 Adjustment	
25% of (7) minus (6)	(41,018)
9 Minimum Actuarial Value of Assets as of 1/1/2004	
80% of (7)	\$2,150,226
10 Maximum Actuarial Value of Assets as of 1/1/2004	
120% of (7)	\$3,225,339
11 Actuarial Value of Assets as of 1/1/2004	<b>\$2,810,838</b>
(6) plus (8), but not less than (9) nor more than (10)	
12 AAV as percent of Market Value	105%

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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.

If the actuarial asset value would otherwise be outside a 20% 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 Valuation Date	Value of Assets	Asset Valuation Basis	Actuarial Accrued Liability (AAL)*	Type*	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
1/1/1998	188,676	Actuarial	2,229,875	PBO	2,041,199	8.5%	5,340,597	38.2%
<b>1/1/1998</b>	<b>188,676</b>	Actuarial	<b>366,584</b>	UC	<b>177,908</b>	<b>51.5%</b>	<b>5,340,597</b>	<b>3.3%</b>
<b>1/1/1999</b>	<b>545,442</b>	Actuarial	<b>989,945</b>	UC	<b>444,502</b>	<b>55.1%</b>	<b>5,773,116</b>	<b>7.7%</b>
<b>1/1/2000</b>	<b>1,020,473</b>	Actuarial	<b>1,371,407</b>	UC	<b>350,934</b>	<b>74.4%</b>	<b>5,606,521</b>	<b>6.3%</b>
<b>1/1/2001</b>	<b>1,469,623</b>	Actuarial	<b>2,013,106</b>	UC	<b>543,483</b>	<b>73.0%</b>	<b>5,679,787</b>	<b>9.6%</b>
<b>1/1/2002</b>	<b>1,921,264</b>	Actuarial	<b>3,272,152</b>	UC	<b>1,350,888</b>	<b>58.7%</b>	<b>5,824,388</b>	<b>23.2%</b>
<b>1/1/2003</b>	<b>2,326,665</b>	Actuarial	<b>3,732,622</b>	UC	<b>1,405,957</b>	<b>62.3%</b>	<b>5,753,077</b>	<b>24.4%</b>
<b>1/1/2004</b>	<b>2,810,838</b>	Actuarial	<b>3,831,659</b>	UC	<b>1,020,821</b>	<b>73.4%</b>	<b>5,718,618</b>	<b>17.9%</b>

- For valuations prior to 1/1/98, GASB 5 required that the pension benefit obligation (PBO) be disclosed. GASB 25 which replaced GASB 5 requires that the actuarial liability used to fund the plan be used to measure funding progress.

GASB 25 results are shown in bold type. Both values are shown for 1/1/98 for comparative purposes.

The mortality table used in the actuarial valuation was updated effective with the 1/1/98 valuation. The new table is the 1994 GAM table with projected mortality improvement.

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**

<b>Eligibility</b>	Two years of service (elapsed time method) excluding police and firefighters. Entry dates are on the July 1 following eligibility.
<b>Retirement ages</b>	
Normal	Age 65. Normal retirement date is first of the month on or after age 65 and completion of 7 years of service.
Early	Age 55 with 7 years of service, or meeting the Rule of 80
Vesting	7 years of service
Disability	Total and permanent disability with 7 or more years of service
Accrued Benefit	A life-only annuity payable at normal retirement age based on career average pay equal to the sum of the past service benefit and the future service benefit.  <u>Past Service Benefit</u> is equal to 2% of base pay rate on 7-1-78 times full years of service from hire to 7-1-78. Available only to employees whose participation in the plan began before 7-1-78.  <u>Future Service Benefit</u> is equal to Accumulation of 2% of base pay rate in effect on each July 1 from 7-1-78 and after. Benefit for a plan year is prorated if the employee does not complete the year.
<b>Retirement Benefits</b>	
Normal	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.
Late	Benefit accruals continue until actual retirement age.
Early	The Accrued Benefit is payable as a life only annuity starting at age 65. An employee may elect earlier payment reduced as follows:  <u>If age plus service equals 80 or more:</u> Reduced 2% for each year the start date precedes normal retirement date.  <u>If age plus service are less than 80:</u> Actuarially reduced (based on 6% interest and UP84 mortality).
Disability	The Accrued Benefit is payable during the period of disability up to age 65. The normal retirement benefit (not subject to continued disability) starts at age 65.  If the employee becomes disabled after age 55 with less than 7 years of service the actuarial equivalent of the Accrued Benefit is payable starting

at age 65 (i.e. full vesting).

**Vesting**

100% vesting after 7 years of service and at normal retirement date.

The Accrued Benefit is payable at age 65 or an actuarially reduced amount may be elected starting on or after age 55.

**Death Benefits**

Married participants

The surviving spouse receives 50% of the participant's accrued benefit for life or until remarriage.

Unmarried participants

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

**Payment Options**

1. Life only annuity
2. Life with 5, 10, 15 or 20 years certain
3. Joint and 100% survivor annuity (spouse only)
4. 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.

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 participants 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.

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.

## Employee Retirement System of Bartlesville, Oklahoma

## SUMMARY OF ACTUARIAL ASSUMPTIONS

Interest Rates	Purpose	Rate	Age	Rates per Thousand				
				Mortality (M)	Mortality (F)	Turnover	Disability	Retirement
Basic valuation			20	0.450	0.260	214.60	0.80	0
Before retirement		7.50%	21	0.475	0.259	197.80	0.85	0
After retirement		7.50%	22	0.504	0.262	182.30	0.91	0
			23	0.544	0.266	167.90	0.96	0
<b>Mortality Tables</b>			24	0.589	0.269	154.60	1.01	0
Before retirement		UP 1994p2004	25	0.643	0.272	142.30	1.07	0
After retirement		UP 1994p2004	26	0.705	0.280	131.10	1.15	0
with projected mortality improvement			27	0.744	0.287	120.90	1.23	0
			28	0.771	0.300	111.60	1.31	0
<b>Pay Increase Assumption</b>			29	0.797	0.316	103.20	1.39	0
Annual rates of pay increase			30	0.820	0.341	95.60	1.47	0
as shown			31	0.840	0.370	88.70	1.60	0
			32	0.858	0.394	82.70	1.73	0
<b>Turnover</b>			33	0.867	0.415	77.30	1.87	0
Select and ultimate rates			34	0.868	0.436	72.50	2.00	0
Ultimate rates are age-related as shown			35	0.870	0.460	68.40	2.13	0
Additional rates per thousand are			36	0.882	0.487	64.80	2.40	0
added during the first 5 years:			37	0.911	0.520	61.70	2.67	0
Year 1:	165		38	0.951	0.558	59.10	2.93	0
Year 2:	105		39	1.002	0.603	56.90	3.20	0
Year 3:	65		40	1.064	0.656	55.00	3.47	0
Year 4:	45		41	1.136	0.710	53.50	3.97	0
Year 5:	35		42	1.217	0.763	52.30	4.48	0
			43	1.302	0.811	51.30	4.99	0
<b>Retirement Age</b>			44	1.390	0.853	50.40	5.49	0
Rates of retirement as shown			45	1.489	0.890	49.80	6.00	0
Rates are only applied if the employee is			46	1.608	0.936	49.20	6.00	0
eligible for Rule of 80 retirement.			47	1.756	0.997	48.60	6.00	0
			48	1.923	1.082	48.00	6.00	0
<b>Other Assumptions</b>			49	2.107	1.174	47.40	6.00	0
Percent married	100%		50	2.312	1.294	46.70	6.00	0
Husband/wife age difference	3		51	2.549	1.435	45.90	6.80	0
			52	2.823	1.619	44.80	7.60	0
Increase in Social Security			53	3.149	1.818	43.50	8.40	0
Wage Base	4.50%		54	3.495	2.027	42.00	9.20	0
			55	3.927	2.276	40.10	10.00	50
			56	4.438	2.594	37.90	11.23	50
			57	5.055	2.986	35.20	12.45	50
			58	5.765	3.435	32.10	13.68	50
			59	6.487	3.951	28.40	14.91	50
			60	7.299	4.540	24.20	16.13	100
			61	8.308	5.208	19.40	16.13	100
			62	9.409	5.964	13.90	16.13	300
			63	10.713	6.828	7.70	16.13	150
			64	12.084	7.793	0.80	16.13	150
			65	13.574	8.832	0.00	0.00	1000

**Oklahoma Municipal Retirement Fund**  
**Bartlesville**  
**AGE AND SERVICE OF ACTIVE PARTICIPANTS**  
 January 1, 2004

Age Group	Years of Service																
	0 - 4		5 - 9		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																	
20 - 24	2															2	
25 - 29	3	6,933	4	28,392												7	19,195
30 - 34	6		2	29,276	4	27,336										12	13,991
35 - 39	6	7,325	6	28,950	2	34,798	7	32,160								21	24,398
40 - 44	5	4,068	4	26,213	10	33,282	8	31,559	10	32,477	1	39,374				38	28,280
45 - 49	3		4	34,138	7	26,722	10	34,857	8	32,854	8	37,469				40	30,869
50 - 54	2		2	48,558			8	32,708	6	40,258	4	32,817	3	30,950		25	32,978
55 - 59			2	27,841	5	34,066	2	31,262	4	34,970	2	34,112	2	43,451		17	34,326
60 - 64	1						1	31,637	2	31,782			4	38,262		8	31,031
65 - 69							1	33,072					2	32,625		3	32,774
70 - 109																	
<b>All Ages</b>	<b>28</b>		<b>24</b>		<b>28</b>		<b>37</b>		<b>30</b>		<b>15</b>		<b>11</b>		<b>173</b>		

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**

January 1, 2004

Age Group	Males			Females			Total		
	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age
<i>Retired Participants in Payment Status</i>									
50 - 54	1	8,217	52.98				1	8,217	52.98
55 - 59	6	28,226	57.70	1	5,519	58.29	7	33,745	57.80
60 - 64	4	13,292	63.74	1	3,829	62.33	5	17,121	63.43
65 - 69	4	9,156	66.75	4	10,146	65.73	8	19,302	66.21
70 - 74	5	7,667	72.46				5	7,667	72.46
75 - 79									
80 - 84									
85 - 89									
90 - 110									
<b>Totals</b>	<b>20</b>	<b>66,558</b>	<b>61.27</b>	<b>6</b>	<b>19,495</b>	<b>62.96</b>	<b>26</b>	<b>86,052</b>	<b>61.65</b>
<b>Ave amount</b>		<b>3,327.88</b>			<b>3,249.10</b>			<b>3,309.70</b>	
<i>Survivors in Payment Status</i>									
50 - 54									
55 - 59				1	2,232	57.39	1	2,232	57.39
60 - 64									
65 - 69									
70 - 74	1	9,936	74.77				1	9,936	74.77
75 - 79									
80 - 84									
85 - 89									
90 - 110									
<b>Totals</b>	<b>1</b>	<b>9,936</b>	<b>74.77</b>	<b>1</b>	<b>2,232</b>	<b>57.39</b>	<b>2</b>	<b>12,168</b>	<b>71.58</b>
<b>Ave amount</b>		<b>9,935.64</b>			<b>2,232.48</b>			<b>6,084.06</b>	
<i>Disabled Participants</i>									
20 - 29									
30 - 39									
40 - 49	2	13,365	45.38				2	13,365	45.38
50 - 54	4	35,890	52.48				4	35,890	52.48
55 - 59	1	11,426	57.60				1	11,426	57.60
60 - 64	2	13,961	63.54	1	7,142	61.32	3	21,103	62.79
65 - 69	2	12,672	66.59				2	12,672	66.59
70 - 74									
75 - 79									
80 - 84									
85 - 89									
90 - 110									
<b>Totals</b>	<b>11</b>	<b>87,313</b>	<b>55.88</b>	<b>1</b>	<b>7,142</b>	<b>61.32</b>	<b>12</b>	<b>94,455</b>	<b>56.29</b>
<b>Ave amount</b>		<b>7,937.55</b>			<b>7,142.04</b>			<b>7,871.26</b>	
<i>Deferred Vested Former Employees</i>									
20 - 29									
30 - 39	3	17,078	36.71				3	17,078	36.71
40 - 49	4	16,890	45.86	4	18,792	44.21	8	35,683	44.99
50 - 54	4	32,559	51.06	1	7,246	52.35	5	39,806	51.29
55 - 59									
60 - 64									
65 - 69									
<b>Totals</b>	<b>11</b>	<b>66,527</b>	<b>46.05</b>	<b>5</b>	<b>26,038</b>	<b>46.48</b>	<b>16</b>	<b>92,566</b>	<b>46.17</b>
<b>Ave amount</b>		<b>6,047.95</b>			<b>5,207.69</b>			<b>5,785.37</b>	
<b>Grand Totals</b>	<b>43</b>	<b>230,334</b>	<b>55.41</b>	<b>13</b>	<b>54,908</b>	<b>54.70</b>	<b>56</b>	<b>285,241</b>	<b>55.28</b>
<b>Ave amount</b>		<b>5,356.60</b>			<b>4,223.66</b>			<b>5,093.59</b>	