
Oklahoma Municipal Retirement Fund

ACTUARIAL VALUATION OF FUNDING REQUIREMENTS

**Effective for the Year Starting
July 1, 2019**

March 29, 2019

Prepared by

DEAN ACTUARIES, LLC

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Certification

This report presents the actuarial position of the member plans of the Oklahoma Municipal Retirement Fund as of July 1, 2018, in accordance with generally accepted actuarial principles applied on a basis consistent with the preceding valuation. The purpose of the valuation is to determine the required contribution for the retirement program effective July 1, 2019.

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

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

DEAN ACTUARIES, LLC

March 21, 2019

Date



Charles E. Dean, FSA, FCA
Enrolled Actuary 17-1249



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Enrolled Actuary 17-3649

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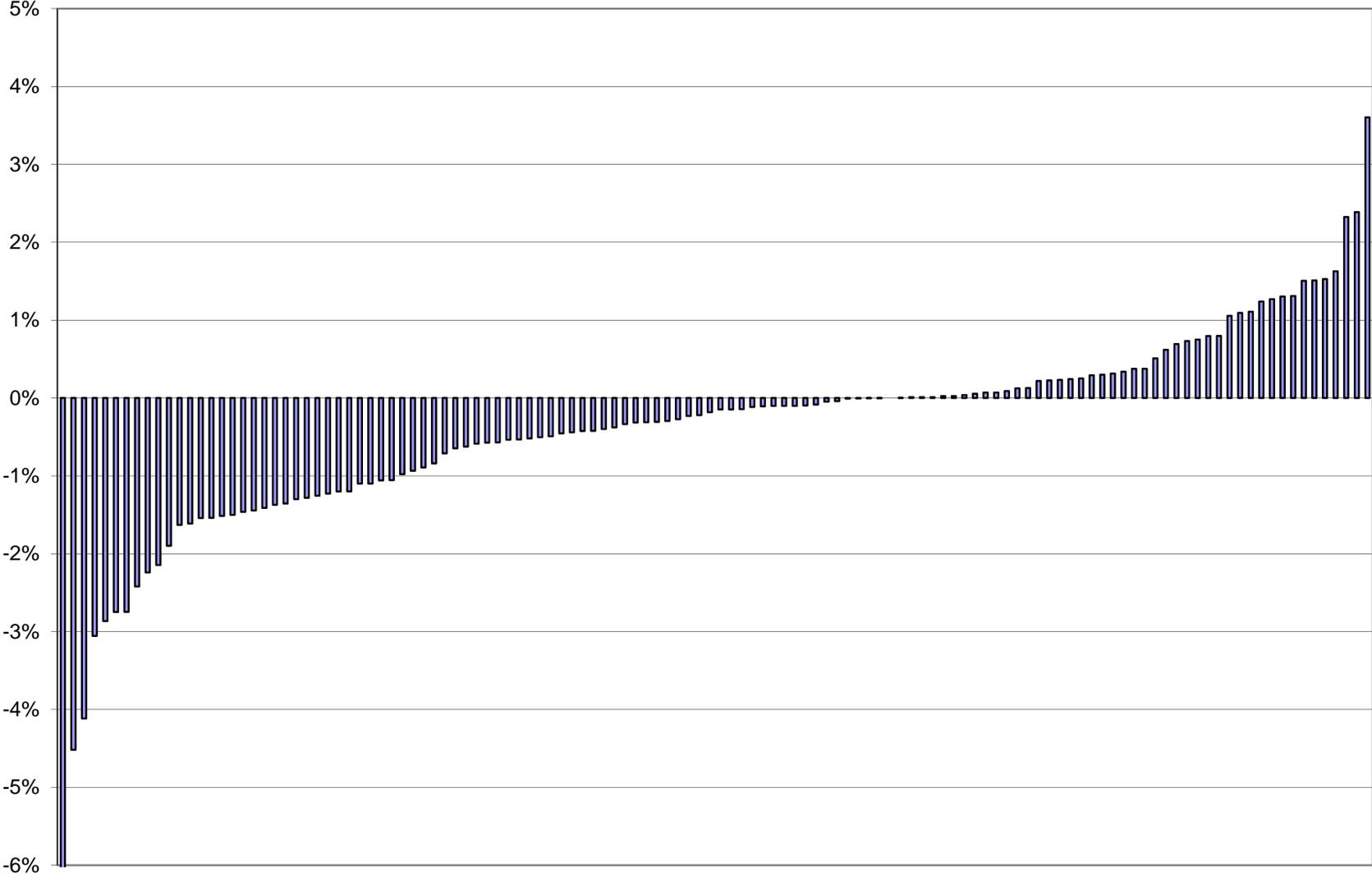
A Comparison of Required Contribution Rates

The exhibit in this section shows the required contribution rates determined by the July 1, 2018 actuarial valuation. These rates will be in effect from July 1, 2019 through June 30, 2020. The following information is presented for each city:

- Whether the plan has an unfunded actuarial liability or a surplus (*UAL or Surplus*). In general, the unfunded actuarial accrued liability is amortized as a level dollar amount over a fixed 30-year period; this amount is then added to the normal cost to determine the total annual cost. For plans that have a surplus, the total annual cost is the normal cost reduced by interest on the surplus.
- The *total rate*. This is the aggregate contribution rate determined under the July 1, 2018 valuation for each plan. The total rate is generally equal to the total annual cost as a percentage of covered payroll, but not less than the employee contribution rate. If employees make hybrid contributions, the hybrid contribution rate is added to the total rate. The rate determined under the July 1, 2017 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 2019-2020 plan year, and is equal to the employee contribution rate plus the hybrid contribution rate. The employer rate is generally determined by subtracting the employee contribution rate from the total rate. If the employee contribution rate actually exceeds the total annual cost because of favorable plan experience in the past (that is, investment performance better than assumed, or demographic changes more favorable than assumed), then the required employer contribution rate 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 OkMRF Master Plan.
- Those cities which have upgraded the plan level or changed another fundamental plan provision since the prior valuation are indicated in the final column.

Oklahoma Municipal Retirement Fund

Change in Contribution Rate as Percent of Covered Payroll



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

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2017	7/1/2018			
Adair	UAL	9.89%	10.19%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Altus	UAL	18.22%	16.85%	4.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, no COLA	
Alva	UAL	9.05%	9.07%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Antlers	Surplus	5.63%	5.14%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Ardmore	Surplus	14.75%	14.48%	6.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, split COLA; 7/11 New Hires: Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Bartlesville	UAL	25.20%	23.95%	6.00%	Plan BAR, normal retirement age 65, 7 year vesting, 0 years certain, no COLA	
Bethany	UAL	15.81%	16.51%	4.60%	Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, split COLA, Hybrid	
Bethany/Warr Acres	UAL	23.39%	20.52%	6.00%	Plan AAA, Rule of 80, 7 year vesting, 10 years certain, no COLA	
Billings	Surplus	9.16%	5.04%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Binger	UAL	5.47%	5.07%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Blackwell	UAL	16.01%	14.73%	4.50%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Blair	UAL	11.20%	10.66%	3.41%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Boise City	UAL	9.69%	9.73%	0.00%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Bokchito	Surplus	4.18%	4.52%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Braman	UAL	25.18%	25.41%	6.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Bristow	Surplus	12.35%	13.10%	5.25%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, COLA	
Broken Bow	UAL	15.06%	14.60%	6.00%	Plan AAA, Rule of 80, 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
		7/1/2017	7/1/2018			
Buffalo	Surplus	7.24%	7.25%	3.50%	Plan AA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Burns Flat	UAL	10.77%	10.78%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Calera	UAL	8.68%	8.64%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Central Oklahoma MCD	Surplus	15.52%	8.87%	6.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, COLA	
Chandler	UAL	11.74%	10.44%	4.50%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Checotah	Surplus	6.07%	5.01%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Cherokee & CDA	UAL	8.06%	7.55%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Chickasha	Surplus	13.15%	11.52%	4.00%	Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, COLA	
Claremore	UAL	6.58%	8.97%	4.47%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA; 7/10 New Hires: dble upgrade, ee cont (new)	
Cleo Springs	UAL	11.01%	8.59%	3.73%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Cleveland	UAL	25.31%	25.01%	6.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Clinton	Surplus	12.78%	11.17%	5.25%	Plan AAA, normal retirement age 62/30, 7 year vesting, 10 years certain, COLA	
Collinsville	UAL	14.57%	13.03%	4.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Copan	UAL	9.10%	7.58%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Cordell	Surplus	9.63%	8.40%	0.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Cushing	Surplus	8.70%	7.86%	0.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, no COLA	
Davis	UAL	12.23%	12.96%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	

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

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2017	7/1/2018			
Del City	UAL	28.47%	29.78%	6.00%	Plan AAA, special retirement age, 7 year vesting, 10 years certain, split COLA, Hybrid; 2/10 new hires: Plan AAA, special retirement age, 7 year vesting, 10 years certain, no COLA	
Dewey	UAL	14.57%	14.79%	4.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Drumright	UAL	19.90%	19.59%	6.00%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Durant	UAL	10.93%	10.78%	3.50%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, split COLA	
El Reno	UAL	12.53%	12.60%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Eufaula	Surplus	6.57%	6.56%	3.75%	Plan CC, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Fort Cobb	UAL	13.52%	12.06%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Foss Reservoir Public Works	UAL	22.20%	19.15%	3.75%	Plan BB, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Frederick	UAL	9.81%	8.36%	4.33%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Garber	Surplus	6.85%	6.23%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Geary	Surplus	10.51%	9.80%	2.94%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Goodwell	UAL	6.56%	5.58%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Gore and Gore PWA	Surplus	6.27%	6.15%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Granite	UAL	16.30%	17.83%	4.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Guthrie	UAL	10.73%	9.80%	3.69%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Harrah	UAL	17.77%	17.20%	5.25%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Healdton	UAL	16.29%	17.80%	6.00%	Plan AAA, normal retirement age 65, 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
		7/1/2017	7/1/2018			
Henryetta	UAL	14.15%	17.75%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	upgrade, ee cont
Hooker	UAL	17.16%	16.82%	3.75%	Plan BB, normal retirement age 65, 5 year vesting, 10 years certain, no COLA	
Hulbert	UAL	15.82%	13.58%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Hydro	UAL	10.05%	8.85%	3.00%	Plan A, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Kansas	UAL	4.29%	4.38%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Kiefer	UAL	9.11%	9.00%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Kingston	UAL	11.10%	11.11%	3.75%	Plan CC, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Krebs & Krebs Utility Auth.	UAL	8.36%	7.47%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Laverne	Surplus	6.09%	6.89%	3.75%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade
Lindsay	Surplus	8.59%	7.49%	3.75%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Madiill	Surplus	9.91%	8.81%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Mannford	UAL	25.94%	27.21%	6.00%	Plan AAA, Rule of 80, 5 year vesting, 5 years certain, no COLA	
Marietta	UAL	10.05%	11.16%	5.25%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Marietta PWA	UAL	23.89%	24.18%	5.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
McLoud	Surplus	4.66%	4.48%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Medford	UAL	19.49%	19.39%	4.00%	Plan AA, normal retirement age 62/30, 10 year vesting, 10 years certain, split COLA, Hybrid	
Meeker	Surplus	6.87%	5.51%	3.00%	Plan BB, normal retirement age 65, 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
		7/1/2017	7/1/2018			
Miami	UAL	14.25%	13.81%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 10 years certain, no COLA	
Mooreland	UAL	15.77%	15.18%	4.00%	Plan AA, Rule of 80, 5 year vesting, 5 years certain, no COLA	
Mountain Park MCD	UAL	32.67%	31.13%	6.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Muldrow	UAL	13.85%	13.43%	4.50%	Plan BB, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Mustang	UAL	15.60%	15.84%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Nichols Hills	Surplus	14.05%	13.95%	11.00%	Plan BB, Rule of 80, 7 year vesting, 10 years certain, split COLA, Hybrid; 7/06 New Hires: Plan BB, normal retirement age 65, 7 year vesting, 10 years certain, no COLA	ee cont, hybrid cont
Noble	UAL	13.19%	11.29%	4.25%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Nowata	Surplus	10.63%	11.87%	5.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Oilton	UAL	9.20%	9.32%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Okeene	UAL	12.94%	12.96%	3.60%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Okemah	UAL	11.91%	12.23%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Oklahoma Municipal League	Surplus	11.96%	13.47%	0.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, COLA	
OkMRF Staff	UAL	16.63%	16.63%	4.50%	Plan BB, normal retirement age 65, 5 year vesting, 10 years certain, no COLA	
Okmulgee	Surplus	6.85%	7.91%	0.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, COLA	
Owasso	UAL	12.84%	12.73%	4.26%	Plan AA, normal retirement age 62/30, 5 year vesting, 5 years certain, no COLA	
Pawnee	Surplus	14.75%	10.23%	6.00%	Plan AAA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Perkins	Surplus	12.71%	11.21%	4.50%	Plan BB, normal retirement age 65, 7 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
		7/1/2017	7/1/2018			
Perry	UAL	12.63%	12.25%	4.00%	Plan AA, normal retirement age 65, 10 year vesting, 10 years certain, no COLA	
Piedmont	Surplus	7.35%	6.93%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Pond Creek	UAL	14.71%	11.96%	4.50%	Plan BB, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Porum	UAL	5.60%	5.37%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Poteau	UAL	13.25%	13.03%	4.25%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Ratliff City	UAL	6.24%	6.31%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Ringling	UAL	7.05%	6.97%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Roland	UAL	9.11%	8.80%	3.75%	Plan CC, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Sallisaw	UAL	20.94%	19.53%	7.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA; 11/14 New Hires: Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Seiling	Surplus	6.97%	5.77%	4.90%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Shawnee	UAL	19.01%	19.52%	4.25%	Plan AA, Rule of 80, 7 year vesting, 10 years certain, split COLA, Hybrid	
Skiatook	UAL	13.76%	13.22%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Spencer	Surplus	9.41%	8.77%	5.25%	Plan AA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA, Hybrid	
Spiro	UAL	9.24%	9.24%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Stilwell	Surplus	8.43%	8.39%	4.50%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Stratford	Surplus	2.93%	2.64%	1.39%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Stroud	UAL	13.23%	13.36%	4.50%	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
		7/1/2017	7/1/2018			
Sulphur	UAL	17.25%	19.58%	5.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Talihina & TPWA	Surplus	2.87%	2.35%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Thomas	UAL	22.68%	23.05%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Tipton	UAL	6.23%	5.66%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Tishomingo	UAL	8.57%	8.82%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Tonkawa	UAL	11.91%	13.00%	3.50%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Velma	Surplus	3.00%	3.00%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Vian	Surplus	6.50%	5.44%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Vinita	UAL	22.62%	23.00%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, COLA	
Wakita	Surplus	2.25%	2.25%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Warr Acres	UAL	14.55%	15.86%	4.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, no COLA; 7/11 New Hires: Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Watonga	UAL	20.09%	20.32%	4.00%	Plan AAA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Waukomis	Surplus	10.79%	8.65%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Waurika	Surplus	11.61%	12.23%	4.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Weatherford	UAL	15.24%	15.10%	6.25%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Webbers Falls	Surplus	2.50%	2.49%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Wellston	UAL	11.34%	11.24%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	

Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2017	7/1/2018			
Westville Utility Authority	UAL	12.30%	12.16%	6.00%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Wetumka	UAL	22.17%	19.42%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Wilburton	UAL	4.88%	4.93%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Yale	Surplus	13.61%	15.24%	6.00%	Plan AAA, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Yukon	UAL	19.06%	19.86%	3.00%	Plan AAA, normal retirement age 62/30, 5 year vesting, 5 years certain, no COLA; 7/05 New Hires: Plan AAA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Weighted Avg Contribution Rates		13.90%	13.77%	4.30%		

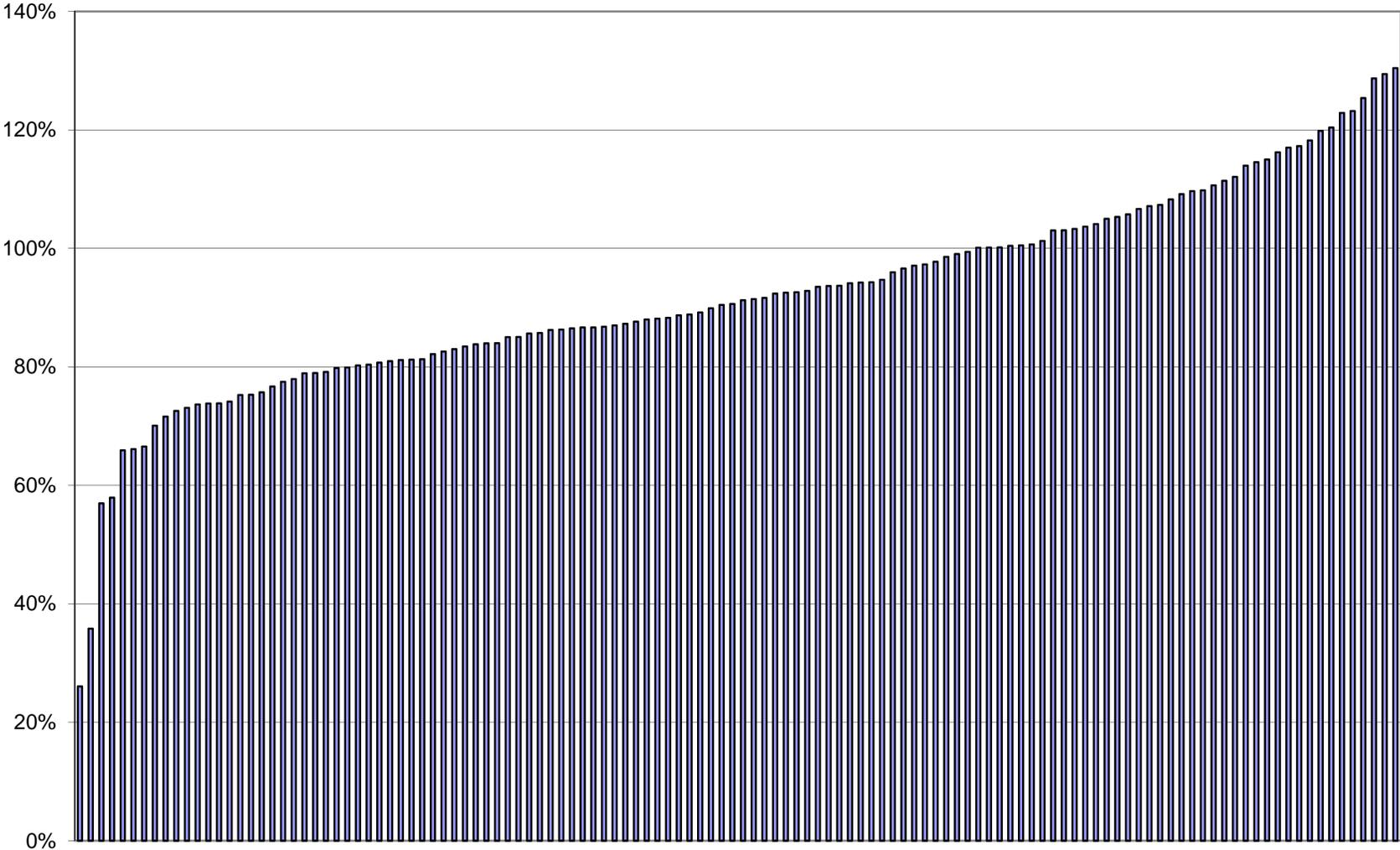
B Comparison of Plan Assets and Obligations

The exhibit in this section shows the plan assets and obligations as of July 1, 2018, disclosure information formerly required under GASB 50 for information purposes only, 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 hybrid account balances are subtracted from the actuarial value of assets to determine the valuation assets. See Section D for the development of the actuarial value of assets.
- The *valuation payroll*. This is the total compensation paid in fiscal year 2018 to employees who were active participants on July 1, 2018. Pay for employees who worked less than a full year in fiscal 2018 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 July 1, 2018, discounted to the valuation date at the assumed rate of return (7.25% for all plans). The PVB is shown separately for active and nonactive participants.
- The *actuarial accrued liability (AAL)*. This amount 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 (UAAL)*. This amount 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.
- The *funded ratio* is the valuation assets as a percent of the actuarial accrued liability.
- The *unfunded UAAL as % of val pay* 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.
- The *accumulated benefit obligation (ABO)*. This is the total of all benefits actually accrued under the plan as of July 1, 2018, discounted to the valuation date at the assumed rate of return (7.25% for all plans).

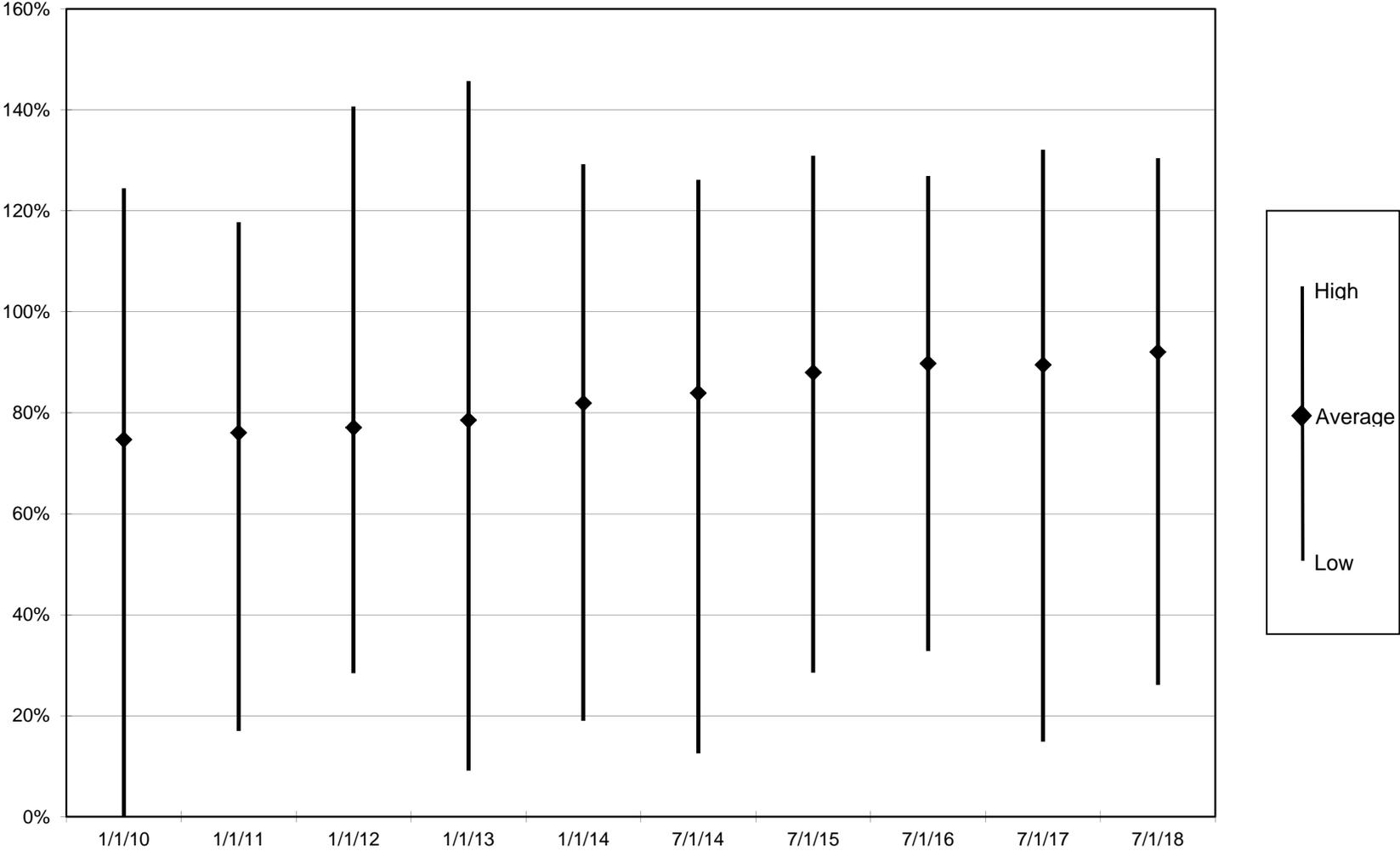
Oklahoma Municipal Retirement Fund

Funded Ratio as of 7/1/2018



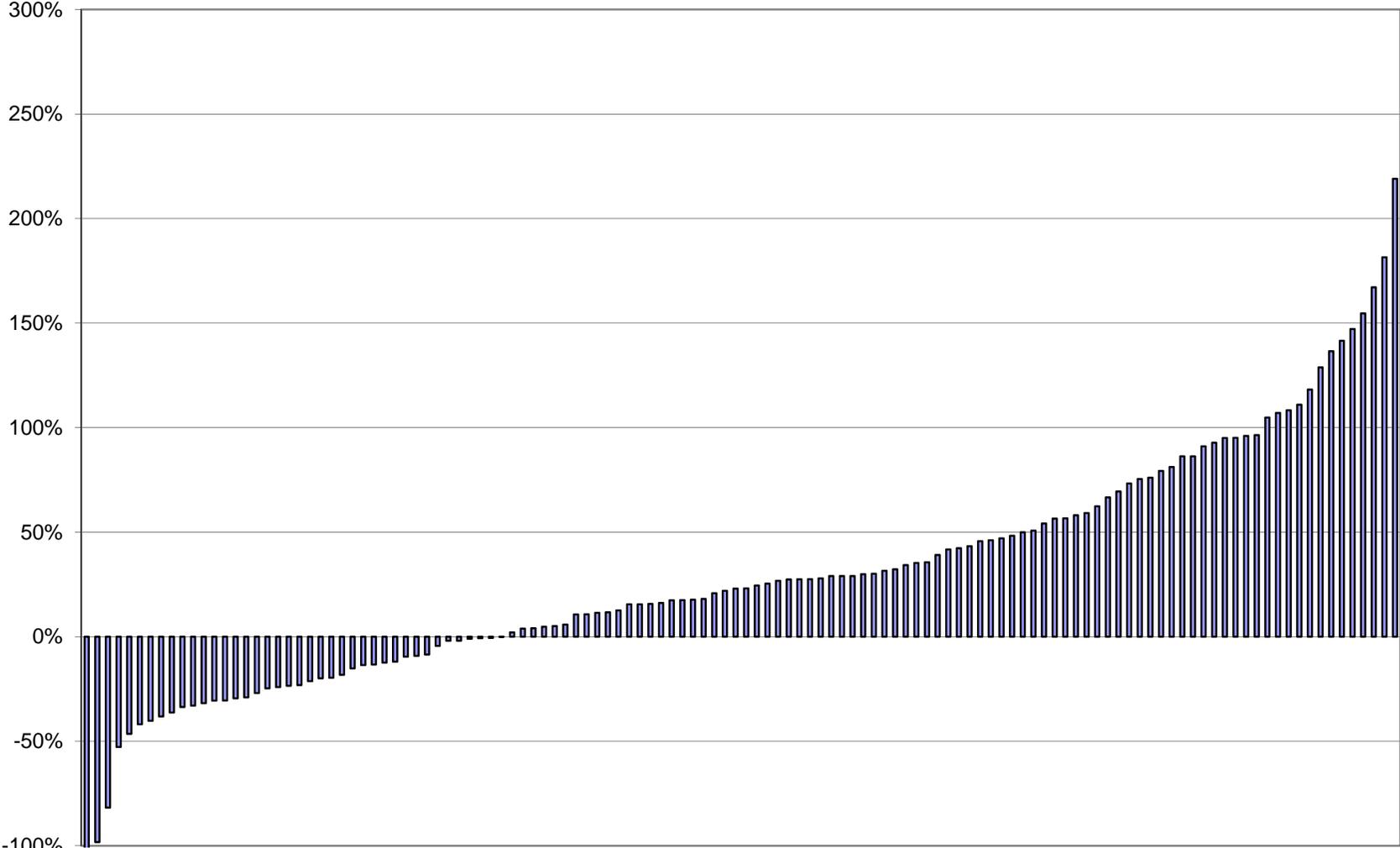
Oklahoma Municipal Retirement Fund

Funded Ratios

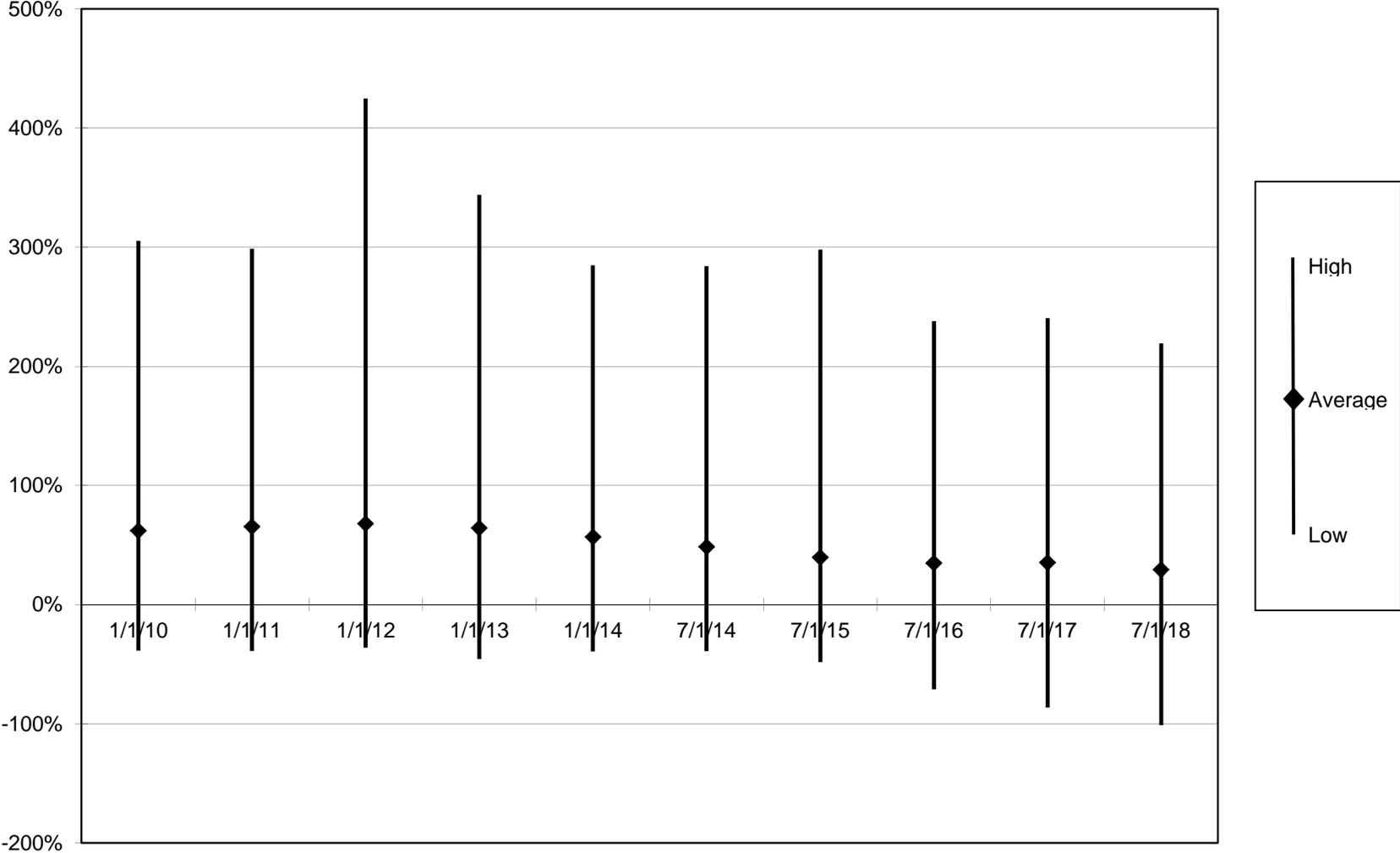


Oklahoma Municipal Retirement Fund

UAAL as Percent of Covered Payroll



UAAL as Percent of Covered Payroll



Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Adair	UAL	269,235	152,945	176,450	201,917	285,551	16,316	94.3%	10.7%	5	5	240,122
Altus	UAL	20,714,910	5,397,875	13,485,336	14,418,747	24,821,388	4,106,478	83.5%	76.1%	136	90	21,567,946
Alva	UAL	3,988,201	2,228,757	4,370,247	1,096,439	4,610,483	622,282	86.5%	27.9%	51	14	3,521,997
Antlers	Surplus	1,296,292	800,964	953,594	512,623	1,187,423	(108,869)	109.2%	(13.6)%	29	13	984,462
Ardmore	Surplus	31,300,774	8,236,196	28,011,554	9,668,746	31,140,631	(160,143)	100.5%	(1.9)%	173	74	24,972,569
Bartlesville	UAL	19,346,115	5,117,008	17,492,520	11,184,084	24,214,095	4,867,980	79.9%	95.1%	117	144	24,214,095
Bethany	UAL	23,761,516	3,745,894	14,402,794	12,241,447	24,424,966	663,451	97.3%	17.7%	81	51	20,785,596
Bethany/Warr Acres	UAL	2,608,123	306,116	1,713,880	1,424,096	2,935,728	327,605	88.8%	107.0%	7	9	2,632,684
Billings	Surplus	287,847	70,678	193,907	94,810	262,182	(25,664)	109.8%	(36.3)%	2	4	220,060
Binger	UAL	214,956	168,494	196,673	68,344	221,419	6,463	97.1%	3.8%	5	1	191,040
Blackwell	UAL	6,347,689	2,117,426	5,228,358	3,147,201	6,927,156	579,466	91.6%	27.4%	53	31	5,707,068
Blair	UAL	489,591	146,557	537,677	47,321	506,739	17,147	96.6%	11.7%	4	1	348,466
Boise City	UAL	1,640,612	425,979	1,012,053	877,940	1,754,611	113,999	93.5%	26.8%	13	10	1,627,616
Bokchito	Surplus	153,710	216,811	142,390	66,057	124,786	(28,923)	123.2%	(13.3)%	8	1	102,385
Braman	UAL	232,075	82,429	92,301	301,344	348,737	116,662	66.5%	141.5%	2	2	328,774
Bristow	Surplus	3,684,543	853,444	2,163,901	1,911,135	3,402,736	(281,807)	108.3%	(33.0)%	26	17	2,879,147
Broken Bow	UAL	5,708,497	2,007,481	5,299,877	2,349,973	6,169,693	461,196	92.5%	23.0%	58	19	4,616,950
Buffalo	Surplus	1,032,670	211,016	465,747	622,658	968,271	(64,399)	106.7%	(30.5)%	8	5	839,574

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Burns Flat	UAL	747,312	341,667	606,232	426,358	889,819	142,507	84.0%	41.7%	10	3	714,136
Calera	UAL	1,014,651	815,748	1,078,895	493,613	1,271,479	256,828	79.8%	31.5%	23	4	956,793
Central Oklahoma MCD	Surplus	1,844,510	261,961	995,736	823,879	1,587,115	(257,395)	116.2%	(98.3)%	6	4	1,327,355
Chandler	UAL	2,854,680	1,018,546	3,022,431	449,321	3,032,861	178,181	94.1%	17.5%	26	9	2,409,297
Checotah	Surplus	2,331,394	1,277,173	1,648,831	1,000,995	2,213,763	(117,632)	105.3%	(9.2)%	40	19	1,776,367
Cherokee & CDA	UAL	378,280	438,109	409,084	225,515	510,260	131,980	74.1%	30.1%	13	7	423,636
Chickasha	Surplus	17,141,011	1,683,001	5,928,433	11,801,884	16,464,182	(676,829)	104.1%	(40.2)%	48	49	15,261,882
Claremore	UAL	18,223,929	6,095,827	12,092,879	9,998,020	18,990,710	766,781	96.0%	12.6%	146	77	15,637,980
Cleo Springs	UAL	213,618	42,760	243,868	10,979	254,847	41,229	83.8%	96.4%	1	1	254,847
Cleveland	UAL	2,696,427	636,672	2,003,603	1,860,753	3,516,350	819,923	76.7%	128.8%	14	13	3,138,005
Clinton	Surplus	13,398,754	1,911,721	8,177,890	6,041,089	12,669,783	(728,970)	105.8%	(38.1)%	51	52	10,571,919
Collinsville	UAL	3,116,977	1,334,572	2,897,809	1,409,376	3,592,294	475,318	86.8%	35.6%	37	18	2,909,472
Copan	UAL	58,550	185,554	109,967	83,828	163,555	105,005	35.8%	56.6%	4	3	134,315
Cordell	Surplus	5,102,413	763,420	2,504,232	2,771,884	4,859,411	(243,002)	105.0%	(31.8)%	22	25	4,386,417
Cushing	Surplus	21,137,353	3,499,952	10,210,518	12,415,007	21,112,516	(24,837)	100.1%	(0.7)%	89	96	18,247,136
Davis	UAL	2,179,532	1,024,667	2,014,795	1,045,350	2,476,933	297,401	88.0%	29.0%	32	14	2,017,633
Del City	UAL	17,654,096	3,190,976	12,303,097	13,473,588	23,445,164	5,791,068	75.3%	181.5%	85	66	20,637,811
Dewey	UAL	1,834,635	556,494	1,906,452	541,810	2,116,987	282,351	86.7%	50.7%	16	8	1,512,713

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Drumright	UAL	2,562,586	529,477	888,809	2,609,965	3,188,355	625,769	80.4%	118.2%	15	25	2,964,850
Durant	UAL	23,227,689	4,705,673	13,137,365	13,148,718	23,450,963	223,274	99.0%	4.7%	120	92	20,058,021
El Reno	UAL	4,618,760	3,072,276	5,705,840	2,058,782	6,100,665	1,481,905	75.7%	48.2%	64	30	4,406,904
Eufaula	Surplus	1,336,624	471,005	577,504	835,703	1,199,735	(136,889)	111.4%	(29.1)%	17	9	1,085,552
Fort Cobb	UAL	254,538	130,693	82,626	287,615	309,821	55,284	82.2%	42.3%	4	2	296,854
Foss Reservoir Public Works	UAL	936,896	272,075	635,010	791,925	1,308,447	371,551	71.6%	136.6%	6	4	1,080,505
Frederick	UAL	4,126,207	1,037,225	2,710,834	1,896,256	4,186,135	59,927	98.6%	5.8%	29	23	3,661,416
Garber	Surplus	82,632	122,880	121,063	8,599	72,127	(10,505)	114.6%	(8.5)%	4	1	32,493
Geary	Surplus	1,495,817	630,160	1,581,103	308,556	1,489,364	(6,453)	100.4%	(1.0)%	18	7	1,051,388
Goodwell	UAL	292,529	218,441	203,195	197,538	315,921	23,392	92.6%	10.7%	6	4	246,692
Gore and Gore PWA	Surplus	724,302	542,313	755,738	103,580	617,677	(106,625)	117.3%	(19.7)%	22	5	416,114
Granite	UAL	1,626,086	263,420	1,136,863	812,807	1,809,040	182,954	89.9%	69.5%	7	4	1,595,345
Guthrie	UAL	6,233,094	1,768,331	4,230,255	3,083,254	6,269,568	36,474	99.4%	2.1%	52	19	4,978,091
Harrah	UAL	2,566,698	649,418	2,582,992	849,344	3,056,477	489,779	84.0%	75.4%	15	10	2,334,726
Healdton	UAL	1,509,447	400,846	1,038,758	980,845	1,692,591	183,144	89.2%	45.7%	11	9	1,417,205
Henryetta	UAL	3,315,905	1,290,358	3,645,408	1,617,962	4,490,437	1,174,531	73.8%	91.0%	37	19	3,408,090
Hooker	UAL	1,144,423	409,867	996,032	704,949	1,477,092	332,670	77.5%	81.2%	9	7	1,226,723
Hulbert	UAL	656,435	390,078	698,879	443,307	992,993	336,558	66.1%	86.3%	12	6	806,506

**Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS**

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Hydro	UAL	371,148	222,121	131,826	391,157	447,182	76,035	83.0%	34.2%	7	6	420,781
Kansas	UAL	130,869	205,802	134,608	62,482	163,109	32,240	80.2%	15.7%	6	4	126,129
Kiefer	UAL	93,188	246,528	217,666	46,968	160,916	67,728	57.9%	27.5%	8	1	99,720
Kingston	UAL	687,301	450,706	740,780	367,947	931,233	243,931	73.8%	54.1%	13	3	810,103
Krebs & Krebs Utility Auth.	UAL	462,129	526,922	521,523	248,001	583,942	121,813	79.1%	23.1%	14	5	467,867
Laverne	Surplus	1,275,916	325,777	537,434	869,607	1,235,437	(40,479)	103.3%	(12.4)%	11	15	1,073,112
Lindsay	Surplus	4,699,158	1,468,794	2,739,599	2,199,409	4,015,964	(683,194)	117.0%	(46.5)%	38	19	3,363,026
Madill	Surplus	2,992,502	990,754	2,766,283	688,396	2,972,996	(19,506)	100.7%	(2.0)%	28	10	2,422,855
Mannford	UAL	3,081,173	850,823	2,718,107	2,432,867	4,396,883	1,315,710	70.1%	154.6%	21	18	3,611,528
Marietta	UAL	1,194,640	541,257	889,728	692,464	1,222,164	27,524	97.7%	5.1%	16	14	970,081
Marietta PWA	UAL	448,302	202,571	432,381	488,396	786,877	338,575	57.0%	167.1%	6	5	644,530
McCloud	Surplus	718,510	694,478	501,723	303,846	555,182	(163,328)	129.4%	(23.5)%	21	13	449,566
Medford	UAL	2,760,419	396,388	2,562,612	620,072	3,024,452	264,033	91.3%	66.6%	9	4	2,416,126
Meeker	Surplus	719,402	284,312	165,570	560,497	600,335	(119,067)	119.8%	(41.9)%	10	11	579,553
Miami	UAL	10,914,501	4,920,014	7,806,929	9,159,278	14,816,237	3,901,736	73.7%	79.3%	123	89	12,586,451
Mooreland	UAL	1,404,967	358,208	437,614	1,459,895	1,628,228	223,262	86.3%	62.3%	8	9	1,511,633
Mountain Park MCD	UAL	985,509	232,726	969,260	709,384	1,495,210	509,701	65.9%	219.0%	5	3	1,289,877
Muldrow	UAL	2,156,393	881,852	1,432,210	1,638,328	2,500,948	344,555	86.2%	39.1%	23	16	2,113,928

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Mustang	UAL	6,971,228	2,166,770	5,394,093	3,993,790	7,908,553	937,324	88.1%	43.3%	43	19	6,524,983
Nichols Hills	Surplus	9,040,238	2,096,631	4,970,462	4,691,415	8,421,679	(618,559)	107.3%	(29.5)%	39	23	7,820,597
Noble	UAL	2,092,139	916,931	2,113,383	716,495	2,387,374	295,235	87.6%	32.2%	22	10	1,948,200
Nowata	Surplus	2,210,633	787,712	1,682,456	980,949	1,997,967	(212,666)	110.6%	(27.0)%	24	26	1,581,751
Oilton	UAL	422,692	224,890	415,492	175,845	457,571	34,879	92.4%	15.5%	9	3	328,381
Okeene	UAL	1,114,577	299,944	972,531	417,482	1,177,010	62,433	94.7%	20.8%	8	6	934,319
Okemah	UAL	1,457,335	1,195,155	1,841,036	758,433	2,008,662	551,327	72.6%	46.1%	32	15	1,485,381
Oklahoma Municipal League	Surplus	7,516,128	965,748	2,981,825	5,079,920	7,292,508	(223,620)	103.1%	(23.2)%	16	21	6,734,867
OkMRF Staff	UAL	1,265,534	674,577	1,924,276	54,398	1,602,553	337,019	79.0%	50.0%	10	2	1,063,781
Okmulgee	Surplus	16,771,702	2,791,197	10,149,010	7,653,836	16,177,217	(594,484)	103.7%	(21.3)%	84	65	12,810,262
Owasso	UAL	17,187,090	7,316,302	18,389,818	5,083,544	18,795,093	1,608,003	91.4%	22.0%	141	57	13,500,677
Pawnee	Surplus	2,899,815	833,661	1,907,171	1,323,273	2,644,630	(255,184)	109.6%	(30.6)%	24	19	2,251,525
Perkins	Surplus	1,179,014	430,246	903,399	552,541	1,100,551	(78,463)	107.1%	(18.2)%	13	9	805,344
Perry	UAL	4,248,475	2,123,201	4,530,759	1,619,886	4,883,060	634,585	87.0%	29.9%	54	14	3,707,064
Piedmont	Surplus	382,619	870,872	683,752	26,167	382,003	(615)	100.2%	(0.1)%	19	1	257,759
Pond Creek	UAL	1,110,032	452,676	1,402,346	182,867	1,365,659	255,627	81.3%	56.5%	13	4	1,116,201
Porum	UAL	364,054	394,141	438,243	106,464	425,182	61,127	85.6%	15.5%	9	2	273,639
Poteau	UAL	6,925,666	1,517,839	4,887,433	3,570,356	7,807,544	881,879	88.7%	58.1%	47	32	6,591,763

**Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS**

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Ratliff City	UAL	141,453	170,974	184,916	37,014	171,272	29,819	82.6%	17.4%	4	1	125,449
Ringling	UAL	178,120	213,043	186,461	112,213	236,699	58,579	75.3%	27.5%	6	4	188,769
Roland	UAL	1,231,524	1,140,291	1,776,871	132,102	1,361,447	129,922	90.5%	11.4%	28	5	888,283
Sallisaw	UAL	15,568,046	3,752,847	13,012,382	8,674,838	19,170,611	3,602,565	81.2%	96.0%	102	57	15,908,769
Seiling	Surplus	964,695	281,526	656,457	343,894	816,056	(148,639)	118.2%	(52.8)%	8	5	636,415
Shawnee	UAL	37,090,517	2,898,608	15,740,473	25,641,296	39,590,545	2,500,027	93.7%	86.2%	93	84	36,337,273
Skiatook	UAL	1,266,272	1,907,513	2,388,680	236,551	1,343,740	77,468	94.2%	4.1%	45	10	969,406
Spencer	Surplus	1,004,367	321,765	540,605	563,750	896,189	(108,178)	112.1%	(33.6)%	10	12	755,551
Spiro	UAL	1,138,512	537,800	752,358	746,205	1,328,247	189,735	85.7%	35.3%	18	12	1,161,244
Stilwell	Surplus	9,420,121	2,275,457	4,195,573	6,504,032	9,406,876	(13,245)	100.1%	(0.6)%	71	50	8,047,855
Stratford	Surplus	313,937	290,138	174,225	166,483	243,943	(69,995)	128.7%	(24.1)%	8	4	193,143
Stroud	UAL	3,519,758	1,401,347	2,605,472	2,460,468	4,347,783	828,025	81.0%	59.1%	39	32	3,613,913
Sulphur	UAL	5,150,346	978,504	4,439,141	2,167,675	6,058,062	907,716	85.0%	92.8%	22	17	4,883,730
Talihina & TPWA	Surplus	766,481	405,246	464,136	317,925	666,439	(100,042)	115.0%	(24.7)%	15	7	601,131
Thomas	UAL	973,732	243,660	672,831	820,551	1,332,276	358,544	73.1%	147.1%	7	9	1,108,613
Tipton	UAL	244,219	148,333	282,412	37,134	287,186	42,967	85.0%	29.0%	5	1	259,902
Tishomingo	UAL	470,620	401,316	426,312	286,899	543,087	72,467	86.7%	18.1%	13	10	450,587
Tonkawa	UAL	2,717,759	752,278	1,576,740	1,858,999	2,902,028	184,269	93.7%	24.5%	20	18	2,386,342

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Retired	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Velma	Surplus	325,548	64,927	32,221	252,116	259,664	(65,884)	125.4%	(101.5)%	3	7	255,119
Vian	Surplus	284,382	348,584	289,929	81,584	231,434	(52,948)	122.9%	(15.2)%	12	4	158,734
Vinita	UAL	8,271,553	1,087,855	3,502,802	6,763,160	9,478,389	1,206,836	87.3%	110.9%	34	41	8,644,666
Wakita	Surplus	226,314	64,522	38,253	162,759	173,529	(52,785)	130.4%	(81.8)%	2	2	166,555
Warr Acres	UAL	8,507,240	1,541,543	4,718,398	5,737,711	9,636,618	1,129,377	88.3%	73.3%	37	31	8,361,257
Watonga	UAL	4,260,944	1,268,247	3,065,789	3,259,451	5,466,814	1,205,870	77.9%	95.1%	36	27	4,699,855
Waukomis	Surplus	451,318	277,807	302,653	282,055	395,997	(55,321)	114.0%	(19.9)%	5	3	330,312
Waurika	Surplus	1,090,126	268,825	670,725	608,632	1,057,983	(32,142)	103.0%	(12.0)%	8	6	875,591
Weatherford	UAL	5,477,297	2,705,793	5,572,497	2,791,688	6,748,989	1,271,692	81.2%	47.0%	73	31	5,420,937
Webbers Falls	Surplus	167,984	297,467	102,543	89,354	139,523	(28,461)	120.4%	(9.6)%	10	13	122,959
Wellston	UAL	556,306	226,904	445,673	270,893	613,949	57,643	90.6%	25.4%	6	7	520,130
Westville Utility Authority	UAL	630,612	302,463	719,143	223,393	679,391	48,779	92.8%	16.1%	7	4	416,144
Wetumka	UAL	1,590,399	405,563	1,036,171	1,218,181	2,015,491	425,093	78.9%	104.8%	16	11	1,788,274
Wilburton	UAL	87,967	860,595	429,913	33,155	337,611	249,644	26.1%	29.0%	27	2	209,415
Yale	Surplus	1,491,962	418,454	749,764	1,089,993	1,473,389	(18,573)	101.3%	(4.4)%	14	14	1,287,870
Yukon	UAL	25,799,306	5,692,510	20,900,691	14,556,906	31,964,449	6,165,143	80.7%	108.3%	91	114	25,279,462
Total		551,350,884	148,080,655	388,768,832	304,303,554	605,249,850	53,898,966	91.1%	36.4%	3,758	2,463	510,912,753

Totals exclude frozen plans and plans with only nonactive participants.

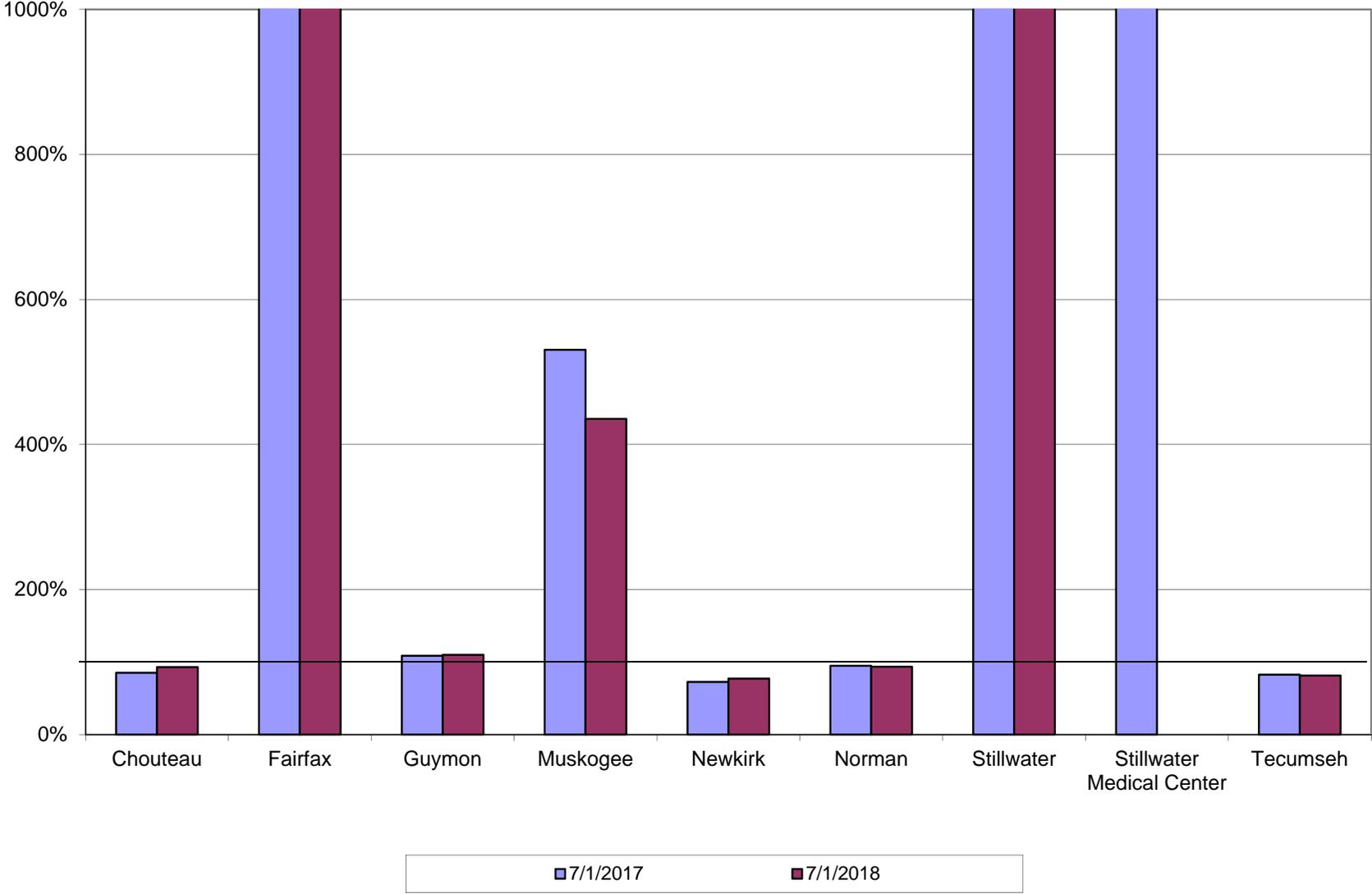
C Funded Status of Plans with No Further Benefit Accruals

There are 8 plans that no longer have employees accruing benefits under the plan, but still have assets in the OkMRF 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 participant categories are active employees with frozen benefits, retirees receiving benefits, beneficiaries of deceased participants entitled to benefits, participants receiving disability benefits, vested participants entitled to future benefits, and nonvested participants entitled only to a refund of their employee contributions with interest. See Section F for more details on the participants included in the valuation.
- The *present value of benefits*. This is the total of all future benefits expected to be paid to plan participants as of July 1, 2018, discounted to the valuation date at the assumed rate of return (7.25%). The present value of benefits is shown separately by participant category.
- The *market value of assets*. Assets for cities with no active participants accruing benefits are valued at fair market value. See Section D for more detail on the trust fund activity during fiscal 2018.
- The *deficiency (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.
- The *funded percentage*. This is the market value of assets as a percent of the plan obligations.
- The *plan funding requirement*. If plan obligations exceed assets, the annual payment required to amortize the deficiency over a specified number of years is reported.

Oklahoma Municipal Retirement Fund

Funded Status of Nonactive Plans



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

FUNDED STATUS OF THE PLAN AS OF JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	0	\$0
Retirees	2	12,314
Survivors	0	0
Disabled	0	0
Deferred Vested	0	0
Nonvested (refunds due)	<u>0</u>	<u>0</u>
Totals	2	\$12,314
Market Value of Assets		\$11,448
Deficiency (Surplus)		\$866
Funded Percentage		93%

Plan assets are not currently sufficient.

Plan Funding Requirement

Annual contribution payable for 1 year commencing July 1, 2019 sufficient to amortize the funding deficiency	\$929
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Actuarial Basis

Interest rate	7.25% 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 JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	0	\$0
Retirees	1	10,660
Survivors	0	0
Disabled	0	0
Deferred Vested	0	0
Nonvested (refunds due)	<u>0</u>	<u>0</u>
Totals	1	\$10,660
Market Value of Assets		\$267,380
Deficiency (Surplus)		(\$256,720)
Funded Percentage		2508%

Plan assets are currently sufficient.

Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2019 sufficient to amortize the funding deficiency	N/A
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Actuarial Basis

Interest rate	7.25% 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 Guymon, Oklahoma**

FUNDED STATUS OF THE PLAN AS OF JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	11	\$798,058
Retirees	28	2,768,117
Survivors	6	188,955
Disabled	5	238,678
Deferred Vested	54	1,546,690
Nonvested (refunds due)	<u>0</u>	<u>0</u>
Totals	104	\$5,540,498
Market Value of Assets		\$6,081,981
Deficiency (Surplus)		(\$541,484)
Funded Percentage		110%

Plan assets are currently sufficient.

Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2019 sufficient to amortize the funding deficiency	N/A
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Actuarial Basis

Interest rate	7.25% 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 Muskogee, Oklahoma**

FUNDED STATUS OF THE PLAN AS OF JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	0	\$0
Retirees	1	9,484
Survivors	0	0
Disabled	0	0
Deferred Vested	0	0
Nonvested (refunds due)	<u>0</u>	<u>0</u>
Totals	1	\$9,484
Market Value of Assets		\$41,286
Deficiency (Surplus)		(\$31,802)
Funded Percentage		435%

Plan assets are currently sufficient.

Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2019 sufficient to amortize the funding deficiency	N/A
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Actuarial Basis

Interest rate	7.25% 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 Newkirk, Oklahoma**

FUNDED STATUS OF THE PLAN AS OF JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	5	\$274,426
Retirees	12	1,051,012
Survivors	1	105,383
Disabled	0	0
Deferred Vested	2	253,584
Nonvested (refunds due)	<u>2</u>	<u>2,013</u>
Totals	22	\$1,686,418
Market Value of Assets		\$1,300,142
Deficiency (Surplus)		\$386,276
Funded Percentage		77%

Plan assets are not currently sufficient.

Plan Funding Requirement

Annual contribution payable for 6 years commencing July 1, 2019 sufficient to amortize the funding deficiency	\$81,666
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Actuarial Basis

Interest rate	7.25% 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 Norman, Oklahoma**

FUNDED STATUS OF THE PLAN AS OF JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	0	\$0
Retirees	6	265,147
Survivors	0	0
Disabled	0	0
Deferred Vested	0	0
Nonvested (refunds due)	<u>0</u>	<u>0</u>
Totals	6	\$265,147
Market Value of Assets		\$247,773
Deficiency (Surplus)		\$17,374
Funded Percentage		93%

Plan assets are not currently sufficient.

Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2019 sufficient to amortize the funding deficiency	\$2,502
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Actuarial Basis

Interest rate	7.25% 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 Stillwater, Oklahoma**

FUNDED STATUS OF THE PLAN AS OF JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	0	\$0
Retirees	1	14,520
Survivors	0	0
Disabled	0	0
Deferred Vested	0	0
Nonvested (refunds due)	<u>0</u>	<u>0</u>
Totals	1	\$14,520
Market Value of Assets		\$9,439,311
Deficiency (Surplus)		(\$9,424,791)
Funded Percentage		65009%

Plan assets are currently sufficient.

Plan Funding Requirement

Annual contribution payable for 10 years commencing July 1, 2019 sufficient to amortize the funding deficiency	N/A
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Actuarial Basis

Interest rate	7.25% 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 JULY 1, 2018

	<u>Count</u>	<u>Present Value of Benefits</u>
Employees with frozen benefits	0	\$0
Retirees	3	95,570
Survivors	0	0
Disabled	2	32,354
Deferred Vested	1	154
Nonvested (refunds due)	<u>23</u>	<u>30,949</u>
Totals	29	\$159,027
Market Value of Assets		\$129,254
Deficiency (Surplus)		\$29,773
Funded Percentage		81%

Plan assets are not currently sufficient.

Plan Funding Requirement

Annual contribution payable for 4 years commencing July 1, 2019 sufficient to amortize the funding deficiency	\$8,839
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Actuarial Basis

Interest rate	7.25% per annum
Mortality	UP 94 mortality (projected)
Cost of Living Adjustments	none
Retirement Age for Deferred Vested	65

D Development of the Actuarial Value of Assets

This section shows the development of the actuarial value of assets as of July 1, 2018.

For pension plans with active participants accruing benefits, the actuarial value of assets is related to market value, but smoothed to reduce the volatility of contribution requirements. The market value of plan assets is compared to the expected value based on the prior year market value to determine the investment gain or loss for the year. This gain or loss is then recognized ratably over a 5-year period beginning with the year ending on that valuation date.

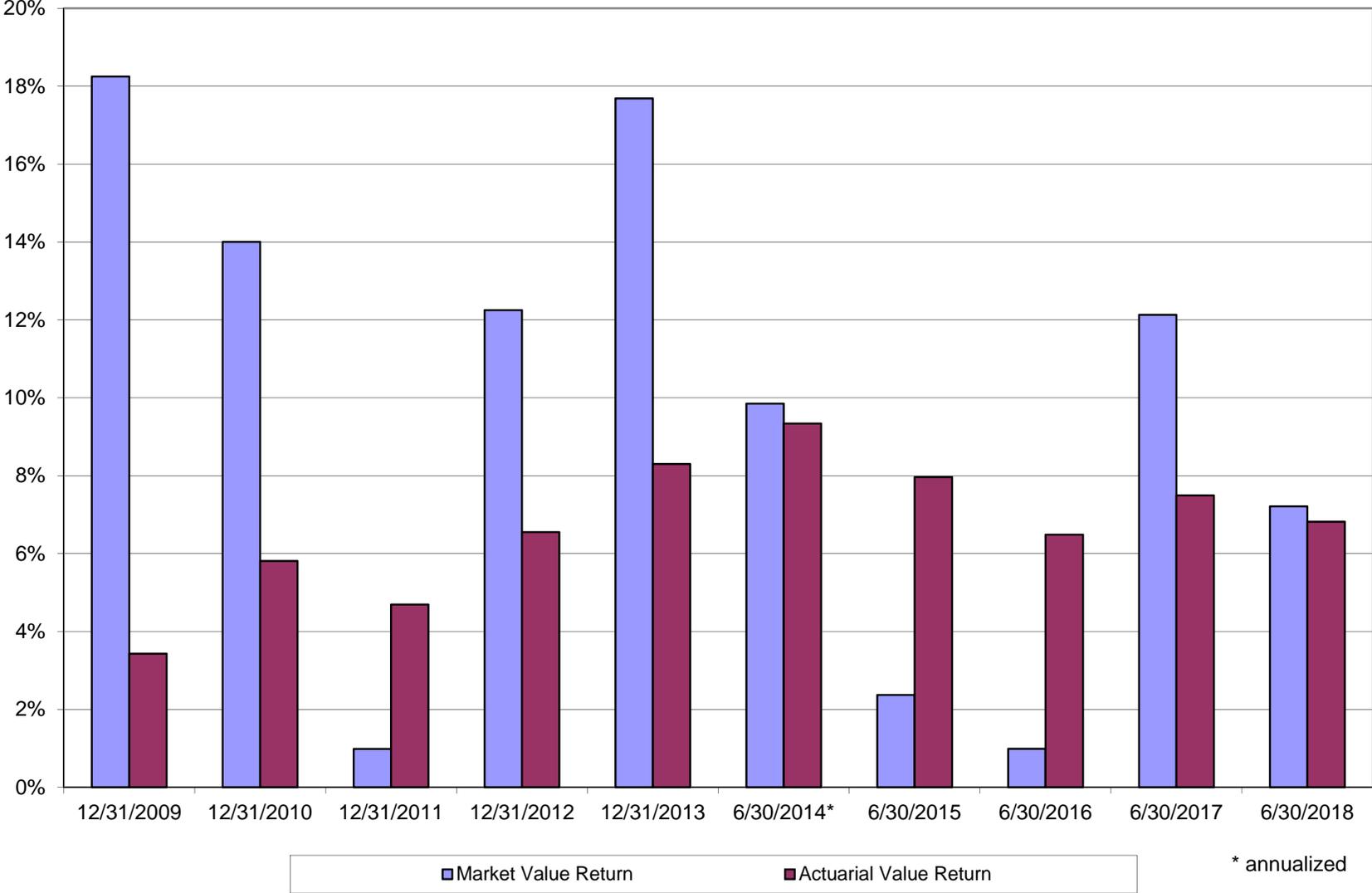
The actuarial value of assets is equal to the market value of assets, plus any unrecognized investment losses (or minus any unrecognized investment gains), subject to a 30% corridor. If the actuarial asset value would otherwise be outside this 30% corridor, it is instead equal to the relevant corridor limit.

For pension plans with no active participants accruing benefits, and for all retiree medical plans, the actuarial value of assets is equal to the current market value. All investment gains and losses are fully recognized on the valuation date.

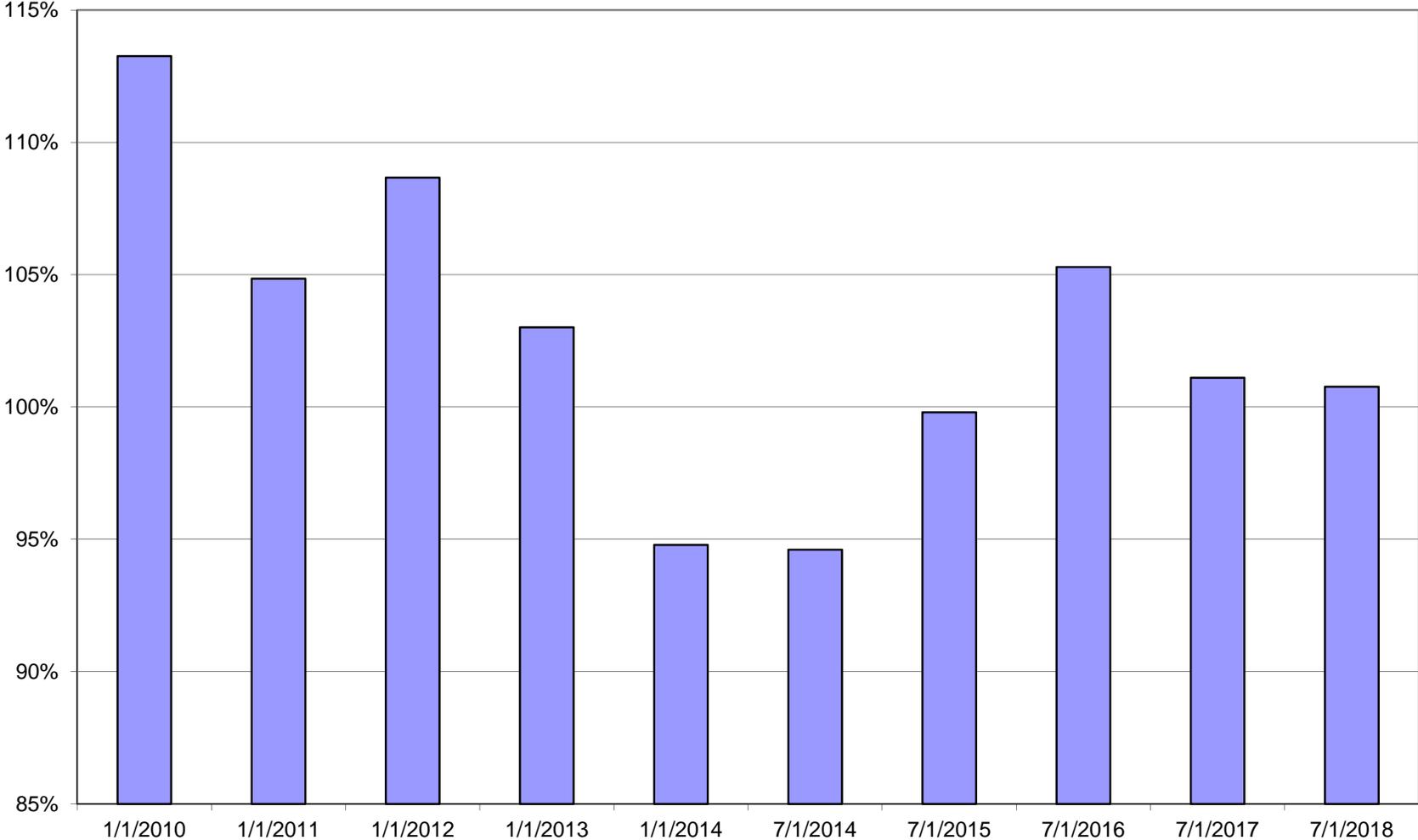
For most plans, the actuarial value of assets also serves as the valuation assets. In a hybrid plan, however, hybrid contributions are used to provide additional benefits, and these amounts are not available to pay the regular retirement benefits. For plans that have adopted the hybrid provision, therefore,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

Oklahoma Municipal Retirement Fund

Historical Return on Plan Assets



Actuarial Value of Assets as Percent of Market Value



Oklahoma Municipal Retirement Fund

Exhibit D

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2016	Actuarial Value of Assets as of 7/1/2016	Market Value of Assets as of 7/1/2017	Actuarial Value of Assets as of 7/1/2017	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2018	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2018
					Employer	Employee	Distributions						
Adair	221,134	233,213	249,244	252,097	10,819	6,734	(17,646)	18,067	267,218	267,032	187	2,203	269,235
Altus	18,415,252	19,439,773	20,343,560	20,598,931	710,312	203,972	(2,161,767)	1,429,687	20,525,764	20,545,473	(19,709)	169,437	20,714,910
Alva	3,380,331	3,566,088	3,558,961	3,613,089	148,669	63,123	(82,698)	262,704	3,950,758	3,945,864	4,895	42,338	3,988,201
Antlers	1,031,605	1,087,778	1,192,460	1,204,252	46,158	24,166	(61,077)	86,789	1,288,495	1,286,819	1,676	9,473	1,296,292
Ardmore	25,209,191	26,592,253	28,851,291	29,121,864	712,659	497,441	(1,029,226)	2,098,275	31,130,440	31,106,541	23,899	194,233	31,300,774
Bartlesville	15,298,668	16,145,324	17,599,884	17,773,163	1,111,238	314,801	(1,075,998)	1,288,681	19,238,605	19,216,232	22,373	129,883	19,346,115
Bethany *	22,989,373	24,225,638	25,316,823	25,614,824	481,380	181,058	(1,336,277)	1,811,043	26,454,027	26,443,190	10,837	227,783	26,670,973
Bethany/Warr Acres	2,243,231	2,365,977	2,461,849	2,491,955	54,435	18,298	(124,545)	176,606	2,586,642	2,585,826	816	22,297	2,608,123
Billings	233,799	246,395	273,500	275,747	5,074	2,703	(14,463)	19,586	286,399	286,516	(117)	1,331	287,847
Binger	164,945	173,841	193,343	194,980	11,523	3,704	(8,821)	14,250	213,999	213,637	362	1,319	214,956
Blackwell	5,268,228	5,433,557	5,981,476	5,984,487	264,181	100,576	(467,438)	429,935	6,308,730	6,297,288	11,443	50,402	6,347,689
Blair	378,693	399,173	440,987	444,697	9,486	4,413	(10)	32,475	487,351	486,723	629	2,869	489,591
Boise City	1,421,883	1,499,798	1,552,019	1,572,209	48,393	0	(85,651)	111,171	1,625,932	1,625,541	391	15,071	1,640,612
Bokchito	122,740	129,714	141,978	143,232	7,061	6,502	(12,731)	10,324	153,133	152,957	177	753	153,710
Braman	228,456	242,241	227,901	232,845	20,978	4,946	(41,289)	15,966	228,503	228,445	57	3,630	232,075
Bristow	3,288,170	3,462,472	3,529,105	3,578,174	77,117	46,307	(254,017)	251,126	3,649,638	3,651,284	(1,645)	33,259	3,684,543
Broken Bow	4,342,499	4,575,777	5,106,662	5,148,317	289,284	128,570	(219,272)	377,432	5,682,675	5,675,841	6,835	32,656	5,708,497
Buffalo	936,467	988,089	998,508	1,013,151	14,226	7,660	(69,260)	70,675	1,021,808	1,021,902	(94)	10,768	1,032,670
Burns Flat	593,375	625,225	687,401	692,376	25,328	12,664	(30,872)	50,095	744,617	743,833	784	3,479	747,312
Calera	797,240	840,042	921,870	929,170	55,397	23,810	(58,106)	67,600	1,010,572	1,008,847	1,724	5,803	1,014,651
Central Okla MCD	1,408,138	1,486,961	1,650,249	1,663,788	119,446	15,718	(70,782)	121,977	1,836,608	1,836,215	393	8,295	1,844,510
Chandler	2,190,966	2,312,226	2,555,972	2,579,181	91,910	47,160	(43,173)	188,784	2,840,654	2,836,774	3,880	17,906	2,854,680
Checotah	1,898,675	2,004,126	2,145,043	2,168,048	92,992	38,855	(116,517)	156,071	2,316,443	2,314,421	2,022	16,973	2,331,394
Cherokee & CDA	261,918	276,759	325,195	327,134	41,890	10,473	(24,541)	24,585	377,602	376,902	699	1,377	378,280
Chickasha	15,468,260	16,315,972	16,676,743	16,893,554	194,981	73,433	(1,140,057)	1,177,467	16,982,567	16,989,975	(7,408)	151,036	17,141,011
Claremore	15,857,377	16,723,225	17,339,150	17,549,523	227,354	216,650	(947,751)	1,238,828	18,074,230	18,072,637	1,594	151,292	18,223,929

Oklahoma Municipal Retirement Fund

Exhibit D

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2016	Actuarial Value of Assets as of 7/1/2016	Market Value of Assets as of 7/1/2017	Actuarial Value of Assets as of 7/1/2017	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2018	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2018
					Employer	Employee	Distributions						
Cleo Springs	168,414	177,504	193,885	195,626	3,840	1,595	(1,022)	14,217	212,515	212,273	242	1,345	213,618
Cleveland	2,328,902	2,456,332	2,564,561	2,595,171	108,004	37,450	(218,255)	183,292	2,675,051	2,674,124	927	22,302	2,696,427
Clinton	11,458,268	12,084,928	12,600,364	12,753,610	178,161	100,574	(494,217)	905,715	13,290,597	13,285,652	4,946	113,102	13,398,754
Collinsville	2,999,438	3,159,291	3,053,871	3,107,017	148,829	56,177	(395,030)	214,517	3,078,364	3,079,935	(1,571)	37,041	3,116,977
Copan	45,946	48,729	51,077	51,777	11,161	2,533	(10,376)	3,823	58,218	58,022	196	528	58,550
Cordell	4,425,533	4,667,796	4,846,882	4,907,015	94,010	0	(227,730)	346,552	5,059,714	5,058,423	1,291	43,990	5,102,413
Cushing	18,902,128	20,028,933	20,400,326	20,683,226	313,202	0	(1,197,801)	1,446,957	20,962,684	20,967,002	(4,318)	170,352	21,137,353
Davis	1,867,872	1,965,716	2,033,335	2,059,548	80,051	45,968	(147,348)	146,644	2,158,650	2,157,254	1,396	22,277	2,179,532
Del City *	15,303,113	16,140,377	16,764,037	16,971,996	452,174	193,791	(1,088,289)	1,199,358	17,521,072	17,516,818	4,254	153,265	17,670,083
Dewey	1,476,321	1,557,122	1,679,623	1,697,221	69,586	23,195	(72,127)	122,521	1,822,799	1,821,368	1,431	13,267	1,834,635
Drumright	2,310,695	2,437,769	2,476,496	2,511,151	71,573	34,744	(221,362)	175,376	2,536,828	2,537,624	(796)	24,962	2,562,586
Durant	19,523,836	20,593,310	21,826,366	22,070,537	358,545	178,254	(874,167)	1,570,182	23,059,180	23,051,507	7,673	176,182	23,227,689
El Reno	3,456,862	3,646,409	4,125,972	4,156,697	270,735	140,360	(240,119)	305,331	4,602,280	4,594,921	7,359	23,839	4,618,760
Eufaula	1,150,862	1,219,319	1,265,578	1,285,303	30,071	19,004	(82,646)	90,537	1,322,544	1,322,674	(130)	13,950	1,336,624
Fort Cobb	222,933	235,125	235,537	238,396	18,046	6,390	(24,326)	17,080	252,726	252,427	299	2,110	254,538
Foss Reservoir Public Wo	869,297	916,033	913,472	924,514	39,676	9,001	(97,394)	64,461	929,216	929,459	(243)	7,437	936,896
Frederick	3,452,899	3,641,655	3,850,477	3,894,654	132,695	44,198	(210,060)	277,957	4,095,266	4,093,161	2,105	33,046	4,126,207
Garber	58,064	61,209	68,946	69,515	3,613	4,608	(139)	5,292	82,319	82,082	237	549	82,632
Geary	1,182,064	1,246,096	1,359,937	1,372,359	46,609	19,951	(38,191)	99,624	1,487,931	1,486,275	1,655	9,541	1,495,817
Goodwell	232,083	244,840	265,792	268,437	13,493	7,427	(15,307)	19,473	290,878	290,525	353	2,004	292,529
Gore and Gore PWA	527,286	555,114	632,895	636,864	37,533	20,630	(16,160)	47,408	722,306	720,845	1,461	3,456	724,302
Granite	1,317,032	1,388,463	1,492,842	1,508,238	53,539	12,839	(52,401)	108,738	1,615,557	1,614,867	691	11,219	1,626,086
Guthrie	5,517,546	5,737,039	6,126,494	6,151,602	144,168	70,852	(583,401)	430,817	6,188,930	6,198,242	(9,312)	34,852	6,233,094
Harrah	1,957,430	2,062,824	2,286,832	2,306,356	105,813	39,680	(46,877)	169,370	2,554,819	2,550,702	4,116	15,995	2,566,698
Healdton	1,262,044	1,330,733	1,423,385	1,439,929	51,577	30,701	(110,287)	102,180	1,497,555	1,497,532	23	11,915	1,509,447
Henryetta	2,998,021	3,161,073	3,043,742	3,082,522	122,373	59,149	(158,802)	221,495	3,287,957	3,285,198	2,759	30,707	3,315,905

Oklahoma Municipal Retirement Fund

Exhibit D

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2016	Actuarial Value of Assets as of 7/1/2016	Market Value of Assets as of 7/1/2017	Actuarial Value of Assets as of 7/1/2017	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2018	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2018
					Employer	Employee	Distributions						
Hooker	959,633	1,011,520	1,064,698	1,075,816	62,261	15,163	(81,942)	77,027	1,137,207	1,136,108	1,099	8,315	1,144,423
Hulbert	532,486	563,658	592,958	600,861	39,543	14,924	(39,582)	43,529	651,372	650,537	835	5,898	656,435
Hydro	342,019	361,391	368,268	374,907	18,594	6,509	(52,624)	25,702	366,449	366,344	105	4,804	371,148
Kansas	101,443	106,976	117,415	118,502	5,003	3,037	(3,909)	8,662	130,209	129,999	210	870	130,869
Kiefer	47,705	49,844	66,110	65,643	19,115	7,596	(4,597)	5,595	93,818	93,316	501	(128)	93,188
Kingston	562,621	592,798	644,444	650,991	39,321	19,175	(66,364)	46,437	683,013	682,088	925	5,213	687,301
Krebs & Krebs Utility Auth.	358,065	377,438	413,176	416,955	27,439	15,188	(26,591)	30,537	459,748	459,119	629	3,010	462,129
Laverne	1,010,699	1,065,635	1,173,555	1,184,845	54,754	18,415	(63,598)	85,430	1,268,557	1,267,383	1,174	8,534	1,275,916
Lindsay	3,953,590	4,178,062	4,460,115	4,514,483	136,407	57,963	(312,677)	319,070	4,660,878	4,663,047	(2,169)	36,111	4,699,158
Madill	2,504,888	2,641,872	2,740,588	2,770,539	81,426	43,107	(92,484)	199,854	2,972,492	2,969,489	3,003	23,013	2,992,502
Mannford	2,631,402	2,775,411	2,876,139	2,910,379	167,372	52,304	(245,682)	207,577	3,057,712	3,055,776	1,936	25,398	3,081,173
Marietta	991,285	1,045,564	1,112,687	1,125,147	26,238	31,886	(65,164)	80,415	1,186,062	1,185,688	374	8,952	1,194,640
Marietta PWA	379,170	400,220	416,486	422,404	45,416	10,129	(57,989)	30,107	444,149	443,579	571	4,724	448,302
McCloud	561,682	591,620	661,597	667,021	42,794	18,056	(55,509)	48,159	715,097	714,483	614	4,027	718,510
Medford *	2,493,945	2,627,794	2,895,234	2,919,092	120,718	17,884	(109,986)	210,942	3,134,792	3,133,923	869	16,359	3,150,282
Meeker	612,529	646,135	681,582	688,972	25,700	8,510	(50,297)	48,831	714,325	714,277	48	5,125	719,402
Miami	9,470,500	10,082,399	10,342,425	10,504,607	635,453	179,680	(1,076,009)	740,369	10,821,918	10,816,305	5,613	98,196	10,914,501
Mooreland	1,265,518	1,336,191	1,337,651	1,357,493	73,894	16,889	(133,100)	95,446	1,390,778	1,390,402	376	14,564	1,404,967
Mountain Park MCD	789,550	832,916	903,594	913,543	63,115	13,964	(67,664)	65,852	978,862	977,751	1,111	7,758	985,509
Muldrow	1,779,271	1,875,538	2,027,065	2,046,857	99,383	39,719	(168,813)	145,885	2,143,239	2,142,003	1,236	14,390	2,156,393
Mustang	6,169,698	6,505,357	6,288,095	6,382,682	260,478	160,670	(263,734)	461,593	6,907,103	6,900,700	6,403	70,529	6,971,228
Nichols Hills *	9,049,530	9,574,657	9,903,238	10,028,912	168,663	231,911	(467,564)	715,556	10,551,805	10,545,785	6,020	84,325	10,630,110
Noble	1,676,328	1,766,876	1,968,403	1,984,624	119,158	38,955	(186,606)	141,676	2,081,587	2,082,537	(950)	9,601	2,092,139
Nowata	1,843,177	1,940,446	2,053,428	2,073,606	49,846	42,841	(98,521)	148,662	2,196,257	2,194,867	1,390	15,766	2,210,633
Oilton	344,500	362,287	388,418	392,090	16,291	10,029	(22,897)	28,284	420,125	419,840	285	2,852	422,692
Okeene	922,092	972,889	1,034,742	1,045,842	29,738	10,537	(42,648)	74,933	1,107,301	1,106,387	915	8,190	1,114,577

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2016	Actuarial Value of Assets as of 7/1/2016	Market Value of Assets as of 7/1/2017	Actuarial Value of Assets as of 7/1/2017	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2018	Investment (Gain)/Loss	Cumulative Unrec Invmnt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2018
					Employer	Employee	Distributions						
Okemah	1,045,797	1,102,375	1,251,724	1,261,312	101,697	44,191	(40,058)	94,586	1,452,139	1,448,878	3,262	8,457	1,457,335
Oklahoma Municipal Leagu	6,419,087	6,768,560	7,089,911	7,177,189	135,000	0	(280,521)	508,743	7,453,133	7,451,068	2,065	65,060	7,516,128
OkMRF Staff	844,114	889,184	1,061,663	1,067,201	96,044	30,356	(5,824)	81,341	1,263,580	1,259,778	3,802	5,756	1,265,534
Okmulgee	14,328,759	15,112,633	15,810,000	15,998,043	291,491	0	(598,257)	1,135,105	16,638,339	16,633,620	4,719	138,082	16,771,702
Owasso	13,467,300	14,190,851	15,562,628	15,702,190	543,455	316,274	(468,902)	1,142,458	17,095,912	17,079,147	16,766	107,943	17,187,090
Pawnee	2,351,641	2,478,526	2,687,056	2,714,821	85,366	63,283	(149,086)	194,796	2,881,415	2,877,946	3,469	21,869	2,899,815
Perkins	979,948	1,033,978	1,098,505	1,110,942	31,935	19,361	(58,718)	79,373	1,170,456	1,169,829	627	9,185	1,179,014
Perry	3,521,829	3,713,478	3,882,024	3,919,674	178,309	83,563	(205,018)	283,508	4,222,387	4,221,335	1,052	27,140	4,248,475
Piedmont	197,366	207,675	292,282	290,952	43,976	26,386	(1,505)	23,686	384,825	383,158	1,667	(539)	382,619
Pond Creek	753,957	793,592	940,534	946,266	110,305	19,855	(35,234)	71,630	1,107,089	1,104,329	2,760	5,703	1,110,032
Porum	253,671	267,148	311,858	313,610	27,590	8,868	(8,593)	23,620	363,343	362,475	867	1,579	364,054
Poteau	5,942,819	6,269,689	6,550,608	6,628,861	159,918	67,965	(376,466)	469,533	6,871,558	6,868,964	2,593	56,701	6,925,666
Ratliff City	96,585	101,578	121,260	121,590	9,969	4,433	(3,422)	9,189	141,429	141,172	257	281	141,453
Ringling	144,054	151,510	163,498	165,272	12,139	4,590	(15,317)	11,905	176,815	176,566	249	1,555	178,120
Roland	861,952	908,981	1,047,271	1,057,045	69,046	41,428	(11,317)	79,522	1,225,949	1,222,294	3,656	9,231	1,231,524
Sallisaw	13,107,289	13,824,590	14,552,216	14,719,330	607,837	265,928	(1,023,236)	1,049,617	15,452,363	15,443,388	8,974	124,658	15,568,046
Seiling	803,232	847,167	899,850	909,895	11,620	14,164	(32,927)	64,980	957,687	957,358	329	7,337	964,695
Shawnee *	33,948,398	35,855,907	36,704,496	37,209,504	462,235	130,099	(2,501,051)	2,591,885	37,387,665	37,378,066	9,599	369,203	37,747,268
Skiatook	622,131	651,129	957,333	949,972	183,470	89,812	(33,464)	78,100	1,275,251	1,269,813	5,438	(3,541)	1,266,272
Spencer *	987,661	1,041,812	1,090,816	1,104,566	0	18,844	(94,532)	76,341	1,091,469	1,092,232	(763)	9,323	1,101,555
Spiro	998,571	1,054,211	1,088,535	1,102,668	31,330	15,665	(84,538)	77,558	1,128,549	1,128,222	327	10,290	1,138,512
Stilwell	7,426,561	7,845,667	9,106,808	9,241,711	95,751	107,798	(630,084)	644,782	9,325,055	9,327,000	(1,945)	93,121	9,420,121
Stratford	255,054	268,475	291,756	294,037	6,521	4,532	(11,441)	21,138	312,506	312,360	145	1,577	313,937
Stroud	2,964,775	3,125,185	3,294,677	3,329,939	168,528	63,776	(269,391)	237,520	3,495,110	3,494,646	464	25,113	3,519,758
Sulphur	4,213,352	4,442,804	4,737,569	4,788,376	170,485	53,277	(190,166)	344,692	5,115,857	5,112,566	3,292	37,780	5,150,346
Talihina & TPWA	667,557	703,935	727,895	736,145	9,840	7,902	(36,741)	52,084	760,981	760,903	78	5,577	766,481

Oklahoma Municipal Retirement Fund

Exhibit D

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2016	Actuarial Value of Assets as of 7/1/2016	Market Value of Assets as of 7/1/2017	Actuarial Value of Assets as of 7/1/2017	Contributions		Distributions	Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2018	Investment (Gain)/Loss	Cumulative Unrec Invmnt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2018
					Employer	Employee							
Thomas	851,759	897,425	927,483	939,215	44,835	14,103	(87,442)	66,209	965,188	964,732	456	9,000	973,732
Tipton	183,724	193,761	220,333	221,994	8,089	3,827	(5,161)	16,219	243,307	243,040	267	1,179	244,219
Tishomingo	373,087	392,748	428,866	432,701	23,043	12,409	(27,586)	31,378	468,109	467,620	489	3,000	470,620
Tonkawa	2,438,534	2,572,811	2,608,523	2,645,120	63,503	27,888	(194,486)	185,381	2,690,809	2,690,692	117	27,067	2,717,759
Velma	296,571	315,259	321,375	327,199	5,184	2,464	(30,022)	22,489	321,490	321,799	(309)	3,749	325,548
Vian	201,703	212,296	246,623	248,129	15,413	10,957	(7,897)	18,550	283,647	282,822	824	1,560	284,382
Vinita	7,687,063	8,104,964	8,485,936	8,588,714	237,615	66,260	(1,182,450)	583,382	8,190,742	8,220,712	(29,970)	50,841	8,271,553
Wakita	212,313	224,697	221,606	225,338	3,687	1,452	(18,676)	15,576	223,645	223,715	(69)	2,599	226,314
Warr Acres	7,302,068	7,703,837	8,045,894	8,133,807	269,192	63,942	(506,253)	577,052	8,449,826	8,447,983	1,843	59,257	8,507,240
Watonga	3,675,205	3,875,726	4,008,580	4,058,087	258,451	54,496	(384,233)	288,038	4,225,332	4,222,137	3,195	38,807	4,260,944
Waukomis	381,823	402,919	425,944	431,362	12,212	14,506	(35,594)	30,559	447,628	447,120	507	4,198	451,318
Waurika	961,706	1,014,782	1,045,505	1,059,117	19,257	12,036	(70,932)	74,362	1,080,228	1,080,736	(508)	9,390	1,090,126
Weatherford	4,148,456	4,371,874	4,958,241	4,991,505	293,481	179,865	(336,594)	364,430	5,459,423	5,454,203	5,221	23,094	5,477,297
Webbers Falls	121,821	128,473	149,054	150,055	13,835	3,368	(9,815)	11,074	167,517	167,064	453	921	167,984
Wellston	447,938	472,174	510,595	515,904	21,708	9,879	(26,705)	37,195	552,673	552,329	344	3,977	556,306
Westville Utility Authority	492,587	518,893	578,874	583,081	19,668	19,157	(31,817)	42,222	628,105	627,632	473	2,981	630,612
Wetumka	1,323,632	1,394,944	1,483,285	1,499,511	101,447	21,293	(133,874)	107,135	1,579,287	1,577,691	1,596	12,708	1,590,399
Wilburton	0	0	45,793	45,073	28,342	13,081	(3,221)	4,705	88,699	87,736	964	232	87,967
Yale	1,299,486	1,371,885	1,418,292	1,437,231	44,482	27,206	(112,804)	101,336	1,478,511	1,478,148	363	13,814	1,491,962
Yukon	21,729,802	22,911,719	24,207,646	24,459,871	876,735	170,904	(1,365,624)	1,743,527	25,633,189	25,620,302	12,887	179,004	25,799,306
Bartlesville **	464,835	464,835	505,208	505,208	41,443	0	(47,346)	36,414	535,718	535,225	493		535,225
Mannford **	55,894	55,894	60,769	60,769	1,134	0	(1)	4,447	66,348	66,286	63		66,286
Weatherford **	32,630	32,630	65,375	65,375	36,177	0	(19,726)	5,336	87,162	86,844	318		86,844
Chouteau *	10,630	10,630	10,971	10,971	2,056	0	(2,336)	785	11,476	11,448	28		11,448
Fairfax *	226,884	226,884	251,837	251,837	0	0	(2,507)	18,167	267,497	267,380	117		267,380
Guymon *	5,697,753	5,697,753	5,986,850	5,986,850	0	0	(329,066)	422,118	6,079,901	6,081,981	(2,080)		6,081,981

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2016	Actuarial Value of Assets as of 7/1/2016	Market Value of Assets as of 7/1/2017	Actuarial Value of Assets as of 7/1/2017	Contributions		Distributions	Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2018	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2018
					Employer	Employee							
Muskogee *	39,085	39,085	41,187	41,187	0	0	(2,321)	2,902	41,767	41,286	481		41,286
Newkirk *	1,332,284	1,332,284	1,350,099	1,350,099	15,000	0	(158,995)	92,662	1,298,766	1,300,142	(1,376)		1,300,142
Norman *	312,310	312,310	287,009	287,009	0	0	(58,787)	18,677	246,900	247,773	(873)		247,773
Stillwater *	7,859,686	7,859,686	8,810,445	8,810,445	0	0	(4,073)	638,610	9,444,981	9,439,311	5,671		9,439,311
Stillwater Medical Center *	700,619	700,619	768,862	768,862	0	0	(825,415)	25,821	(30,731)	0	(30,731)		0
Tecumseh *	140,009	140,009	143,567	143,567	7,500	0	(31,927)	9,523	128,663	129,254	(591)		129,254
Total	488,224,187	514,045,310	542,379,412	548,373,186	16,366,834	6,529,292	(33,193,863)	38,949,214	571,030,889	570,859,617	171,272	4,357,315	575,216,932

* Frozen plan, or plan with only nonactive participants; the Actuarial Value of Assets is equal to the Market Value.

** Retiree medical plan; the Actuarial Value of Assets is equal to the Market Value.

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

E Summary of Plan Provisions and Actuarial Method and Assumptions

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

The first exhibit outlines the provisions of the OkMRF Master Plan. The second exhibit outlines the provisions for the City of Bartlesville, which has not adopted the OkMRF 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.

Oklahoma Municipal Retirement Fund

Summary of Plan Provisions

Eligibility	All regular, full-time employees of a participating employer except police, firefighters and other employees covered under a state system. Cities may elect to cover part-time employees.
Probationary period	Participation may begin immediately, or may commence after completion of a probationary period, as specified in the adoption agreement.
Service	
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. Cities may elect to limit the maximum service credited. Employees of Collinsville may receive additional credit for unused sick leave.
Vesting	Credited service plus transferred service from other OkMRF employers.
Employee contributions	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 (but not in excess of the standard contribution rate), or no employee contributions. The standard contribution rates are: <ul style="list-style-type: none">- Plan AAA 6.00%- Plan AA 5.25%- Plan BB 4.50%- Plan CC 3.75%- Plan A 3.00%- Plan B 2.25%- Plan C 1.50%
Service requirement for benefit eligibility	5, 7 or 10 years of vesting service, as specified in the adoption agreement.
Final Average Compensation	The average of the five highest consecutive annual salaries out to the last 10 calendar years of service.
Accrued Benefit	The percentage of final average compensation specified in the adoption agreement, multiplied by the number of years of credited service. The percentages that may be elected are: <ul style="list-style-type: none">- Plan AAA 3.000%- Plan AA 2.625%- Plan BB 2.250%- Plan CC 1.875%- Plan A 1.500%- Plan B 1.125%- Plan C 0.750%

Oklahoma Municipal Retirement Fund

Summary of Plan Provisions

Normal Retirement Age

Age 65 with service requirement fulfilled.

If specified in the adoption agreement, normal retirement age for an employee with 30 years of vesting service may be as early as age 62.

Also if specified in the adoption agreement, normal retirement age may be as early as 55 when the sum of an employee's age in years and number of years of credited service equals 80 or more, as provided under the Rule of 80 alternative.

Four cities have adopted special retirement provisions not provided in the standard adoption agreements:

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

Normal Retirement

Eligibility

Termination of employment on or after normal retirement age.

Benefit

The accrued benefit payable immediately.

Early Retirement

Eligibility

Termination after age 55 with service requirement fulfilled.

Benefit

The accrued benefit payable starting at normal retirement age, or an actuarially reduced benefit starting at early retirement age.

Disability Retirement

Eligibility

Total and permanent disability.

Benefit

The accrued benefit is payable upon disablement without reduction for early payment.

Termination of Service

Before vesting

Return of member contributions with interest.

After vesting

The accrued benefit payable starting at normal retirement age, or an actuarially reduced benefit starting at early retirement age.

Oklahoma Municipal Retirement Fund

Summary of Plan Provisions

In-service Death

Before vesting	Return of member contributions with interest.
After vesting (married participants only)	50% of the accrued benefit is payable to the spouse until death or remarriage. For employees of Bethany, this benefit is payable for life with 10 years certain.
After vesting (other participants)	50% of the accrued benefit is payable to the designated beneficiary for 60 or 120 months, as specified in the adoption agreement.

Payment Options

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.
Optional forms	Other annuity forms available on an actuarial equivalent basis are: <ul style="list-style-type: none">- Joint and 50% survivor annuity- Joint and 66-2/3rds last survivor annuity (no longer allowed for employees of Chickasha)- Joint and 100% survivor annuity- If specified in the adoption agreement (with or without restrictions), a single lump sum payment

Cost of Living Option

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

Hybrid Option

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

DROP Feature

If specified in the adoption agreement, after reaching age 65, an employee may start their pension, accumulating the payments with earnings as specified in the adoption agreement. This amount, and subsequent monthly payments, are payable upon retirement within 5 years of such election.

**Employee Retirement System Of
Bartlesville, Oklahoma**

SUMMARY OF PLAN PROVISIONS

Eligibility	All regular, full-time employees except police, firefighters and other employees who are covered under an approved system, who joined the plan before 1/1/2010.
Probationary period	<ul style="list-style-type: none">▪ Prior to 7/1/2006: 2 years.▪ On or after 7/1/2006: none.
Employee contributions	<ul style="list-style-type: none">▪ Prior to 7/1/2006: none.▪ On or after 7/1/2006, but before 1/1/2010: 3% of pay.▪ On or after 1/1/2010: 6% of pay.
Service	Participants receive service credit for benefit eligibility for all employment on or after joining the plan (subject to the plan's break in service rules), regardless of whether they opted out of the plan effective 1/1/2010.
Accrued Benefit	<p>The past service benefit plus the future service benefit:</p> <p><u>Past Service Benefit</u> is equal to 2.50% of base pay rate on 7/1/1978 times full years of service from hire to 7/1/1978. Available only to employees whose participation in the plan began before 7/1/1978.</p> <p><u>Future Service Benefit</u> is equal to the sum of: Accumulation of 2.50% of base pay rate in effect on each July 1 from 7/1/1978 through 7/1/2005. Benefit for a plan year is prorated if the employee does not complete the year. Accumulation of 2.50% of actual compensation received during plan years beginning 7/1/2006 and after. Employees who opted out of the plan effective 1/1/2010 accumulate no benefits on compensation earned on or after 1/1/2010.</p>
Benefit Eligibility	
Normal Retirement	Age 65. Normal retirement date is first of the month on or after age 65 and completion of 7 years of service.
Early Retirement	Age 55 with 7 years of service, or meeting the Rule of 80.
Disability Retirement	Total and permanent disability with 7 or more years of service.
Vested Termination	7 years of service.
Nonvested Termination	Not eligible for any other benefit.

**Employee Retirement System Of
Bartlesville, Oklahoma**

SUMMARY OF PLAN PROVISIONS

Benefit Amount

Normal Retirement 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.

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

If age plus service equals 80 or more:
The full benefit unreduced.

If age plus service are less than 80:
Actuarially reduced (based on 6% interest and UP84 mortality).

Disability Retirement The Accrued Benefit is payable during the period of disability up to age 65. An employee who becomes disabled after age 55 with less than 7 years of service is fully vested in the Accrued Benefit payable at age 65.

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

Nonvested Termination Return of employee contributions with interest.

Death Benefits

Before vesting
Return of employee contributions with interest.

After vesting (married participants)
The surviving spouse receives 50% of the participant's accrued benefit for life or until remarriage.

After vesting (unmarried participants)
The beneficiary receives 120 monthly payments in the amount of 50% of the participant's accrued benefit at the time of death.

Payment Options

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

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

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

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

Actuarial equivalency based on 6% interest, UP84 mortality.

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. Assets and liabilities reflect only benefits payable from the OkMRF Trust.

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

The actuarial liability for active participants 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, plus the accumulated employee contributions with interest for non-vested terminated participants.

The unfunded actuarial liability (UAL) is the excess of the total actuarial liability for active and non-active participants, over the actuarial value of plan assets. This amount (redetermined each year) is amortized as a level dollar amount over 30 years from the amortization base date. The amortization base date is initially set as the 2013 valuation date or, if later, the first amortization date after joining OkMRF. 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.

The total annual cost for the year is the normal cost plus the amortization amount. This total cost is expressed as a percent of covered payroll to determine the total required contribution rate, which is then separated into the employee-paid and municipality-paid portions as specified in the adoption agreement.

If assets exceed the actuarial liability, the total annual cost for the year is the normal cost minus interest on the surplus assets. If the surplus subsequently is exhausted, either through changes in plan provisions or adverse experience, a new 30-year amortization base date is established at the first valuation date when the plan again has an unfunded actuarial liability.

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 excess of the total actuarial liability for active and non-active participants, over the actuarial value of plan assets. This amount (redetermined each year) is amortized as a level dollar amount over 30 years from the amortization base date. The amortization base date is the 2010 valuation date. Experience gains (decreases in cost due to favorable experience), or experience losses (increases in cost due to adverse experience), attributable to deviations between the assumed and actual experience of the Plan, are amortized as part of the UAL.

The total annual cost for the year is the normal cost plus the amortization amount. This total cost is expressed as a percent of covered payroll to determine the total required contribution rate, which is then separated into the employee-paid and municipality-paid portions as specified in the plan document.

If assets exceed the actuarial liability, the total annual cost for the year is the normal cost minus interest on the surplus assets. If the surplus subsequently is exhausted, either through changes in plan provisions or adverse experience, a new 30-year amortization base date is established at the first valuation date when the plan again has an unfunded actuarial liability.

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-N		Retire-E
Interest Rates										
	Basic valuation		20	0.545	0.305	150.00	0.80	0	0	7.50%
	Before retirement	7.25%	21	0.570	0.308	145.90	0.85	0	0	7.50%
	After retirement	7.25%	22	0.598	0.311	141.80	0.91	0	0	7.50%
			23	0.633	0.313	137.70	0.96	0	0	7.50%
Mortality Tables										
	Before retirement	UP 1994	24	0.671	0.313	133.70	1.01	0	0	7.50%
	After retirement	UP 1994	25	0.711	0.313	129.60	1.07	0	0	7.50%
	with projected mortality improvement		26	0.749	0.316	125.60	1.15	0	0	7.20%
			27	0.782	0.324	121.60	1.23	0	0	6.90%
			28	0.811	0.338	117.60	1.31	0	0	6.60%
Pay Increase Assumption										
	Annual rates of pay increase as shown		29	0.838	0.356	113.60	1.39	0	0	6.30%
			30	0.862	0.377	109.60	1.47	0	0	6.00%
			31	0.883	0.401	105.70	1.60	0	0	6.10%
			32	0.902	0.427	101.70	1.73	0	0	6.20%
COLA Increase Assumption										
	For benefits subject to adjustment based on change in CPI	2.75%	33	0.912	0.454	97.80	1.87	0	0	6.30%
			34	0.913	0.482	93.90	2.00	0	0	6.40%
			35	0.915	0.514	90.00	2.13	0	0	6.50%
			36	0.927	0.550	87.30	2.40	0	0	6.40%
Turnover										
	Select and ultimate rates		37	0.958	0.593	84.60	2.67	0	0	6.30%
	Ultimate rates are age-related as shown		38	1.010	0.643	81.90	2.93	0	0	6.20%
	Additional rates per thousand are added during the first 5 years:		39	1.075	0.701	79.20	3.20	0	0	6.10%
	Year 1:	225	40	1.153	0.763	76.50	3.47	0	0	6.00%
	Year 2:	140	41	1.243	0.826	73.80	3.97	0	0	5.82%
	Year 3:	100	42	1.346	0.888	71.10	4.48	0	0	5.64%
	Year 4:	70	43	1.454	0.943	68.50	4.99	0	0	5.49%
	Year 5:	40	44	1.568	0.992	65.80	5.49	0	0	5.34%
			45	1.697	1.046	63.20	6.00	0	0	5.21%
			46	1.852	1.111	60.50	6.00	0	0	5.09%
			47	2.042	1.196	57.90	6.00	0	0	4.99%
Retirement Age										
	Normal (N) and early (E) rates		48	2.260	1.297	55.20	6.00	0	0	4.89%
	Normal rates apply when employee is at or above normal retirement age.		49	2.501	1.408	52.60	6.00	0	0	4.82%
	Early rates apply when employee is eligible for early (reduced) retirement.		50	2.773	1.536	50.00	6.00	0	0	4.75%
			51	3.088	1.686	53.30	6.80	0	0	4.71%
			52	3.455	1.864	56.50	7.60	0	0	4.67%
			53	3.854	2.051	59.80	8.40	0	0	4.63%
			54	4.278	2.241	63.10	9.20	0	0	4.61%
Other Assumptions										
	Percent married	100%	55	4.758	2.466	66.40	10.00	250	70	4.58%
	Spouse age difference (female spouses younger)	3	56	5.322	2.755	69.70	11.23	170	70	4.55%
			57	6.001	3.139	73.00	12.45	170	70	4.54%
			58	6.774	3.612	76.40	13.68	170	70	4.53%
			59	7.623	4.154	79.70	14.91	170	70	4.51%
			60	8.576	4.773	83.10	16.13	170	70	4.50%
			61	9.663	5.476	86.40	16.13	170	70	4.50%
			62	10.944	6.271	89.80	16.13	300	300	4.50%
			63	12.335	7.179	93.20	16.13	200	175	4.50%
			64	13.914	8.194	96.60	16.13	150	175	4.50%
			65	15.629	9.286	100.00	0.00	300		4.50%
			66	17.462	10.423	100.00	0.00	300		4.50%
			67	19.391	11.574	100.00	0.00	300		4.50%
			68	21.354	12.648	100.00	0.00	300		4.50%
			69	23.364	13.665	100.00	0.00	300		4.50%
			70	25.516	14.763			1000		

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

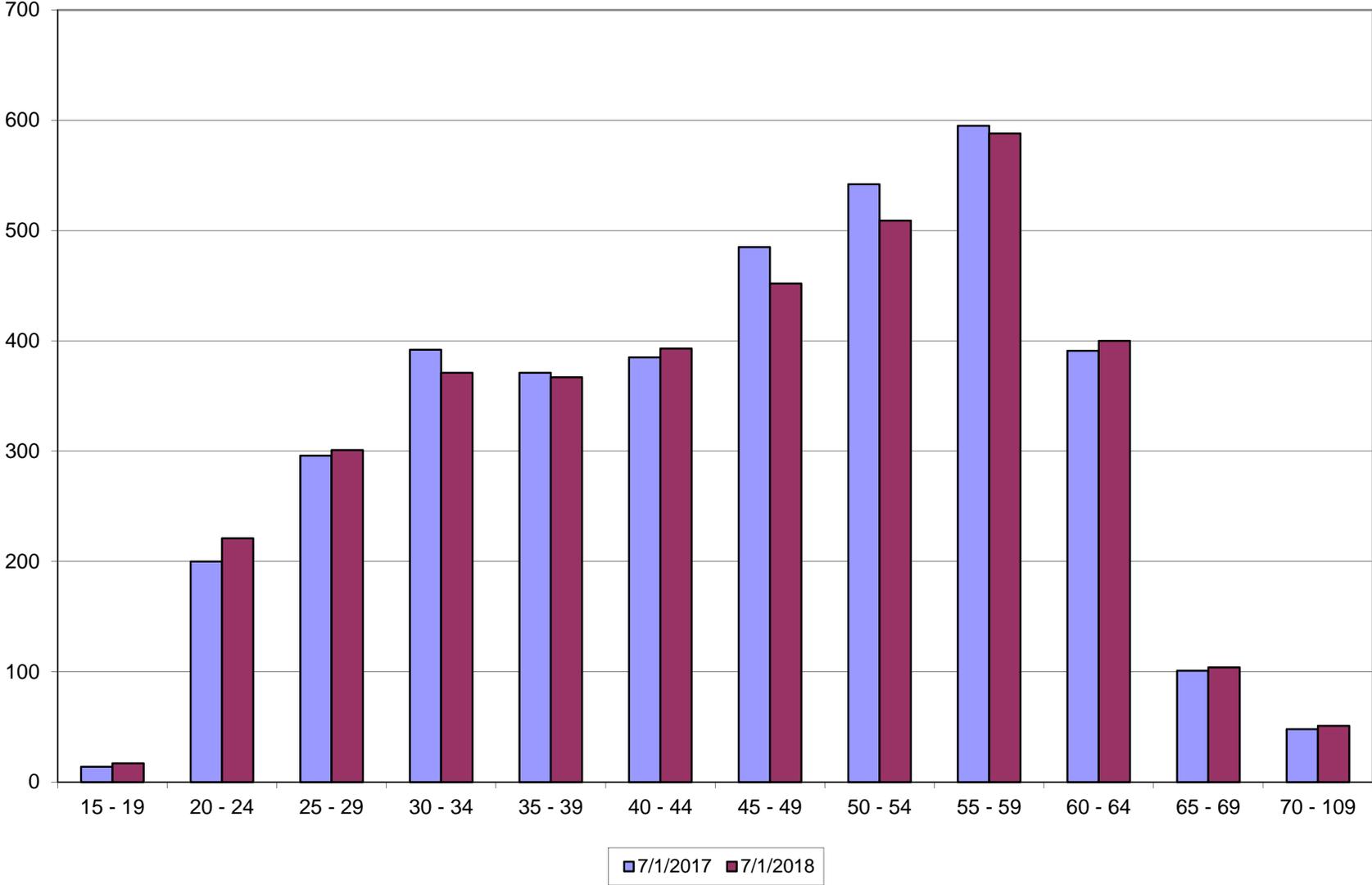
The first three exhibits in this section depict the age and service distribution for active participants as of July 1, 2018 (OkMRF Master Trust in total). The City of Bartlesville is included in the count although it has not adopted the OkMRF master plan. Exhibits F1 and F2 show the July 1, 2017 distributions for comparison, while Exhibit F3 shows more detail on the current year's distribution, including average pay.

The last three exhibits in this section depict the age distribution and average benefit for nonactive participant as of July 1, 2018 (OkMRF Master Trust in total). Again, participants in the City of Bartlesville plan are included. Exhibit F4 breaks down the distribution by each category of nonactive participants, while Exhibit F5 shows the July 1, 2017 distributions for comparison. Exhibit F6 shows more detail on the current year's distribution, including average benefit.

Participants in retiree medical plans are not separately identified.

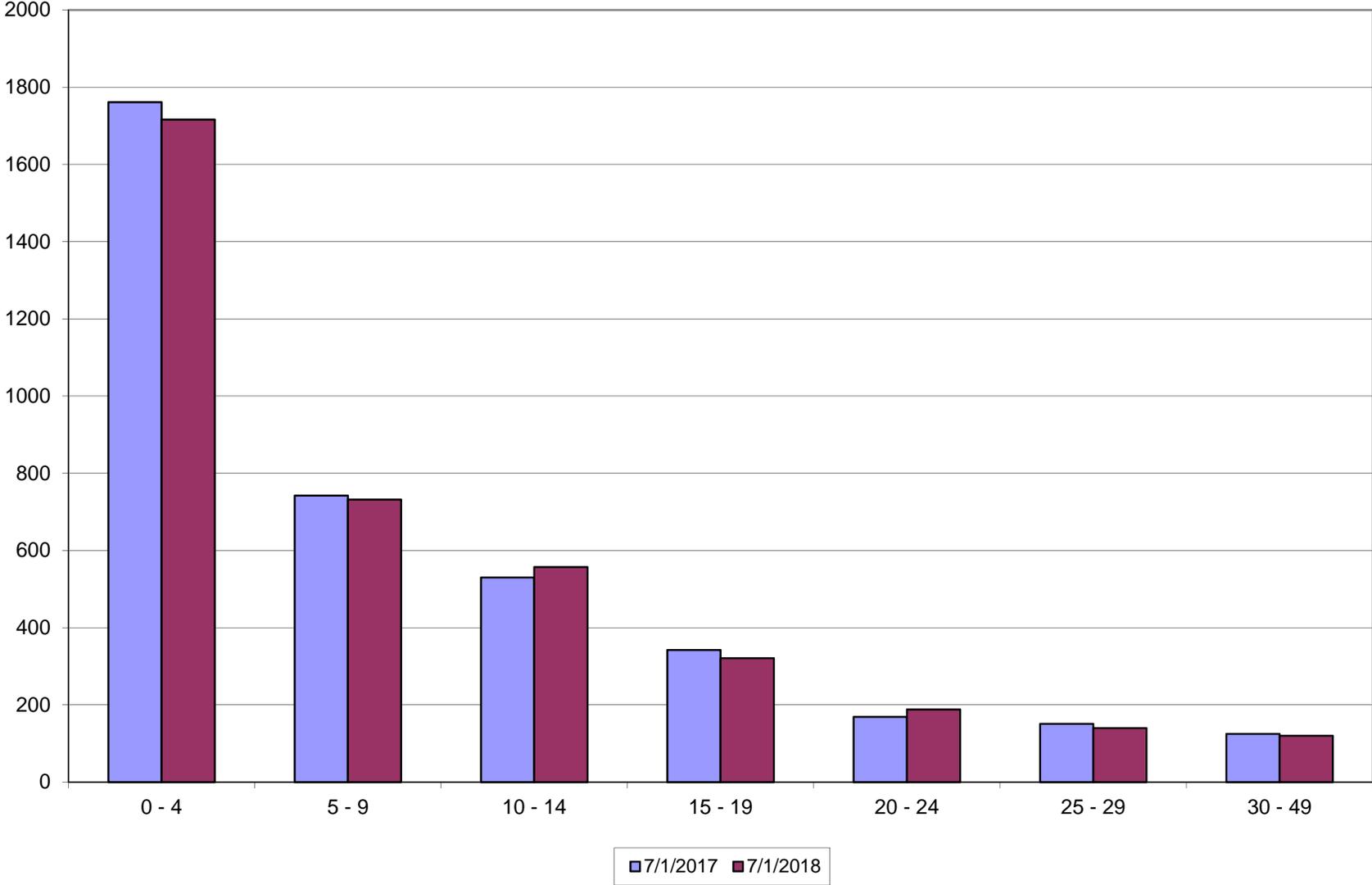
Oklahoma Municipal Retirement Fund

Distribution of Active Employees by Age



Oklahoma Municipal Retirement Fund

Distribution of Active Employees by Service



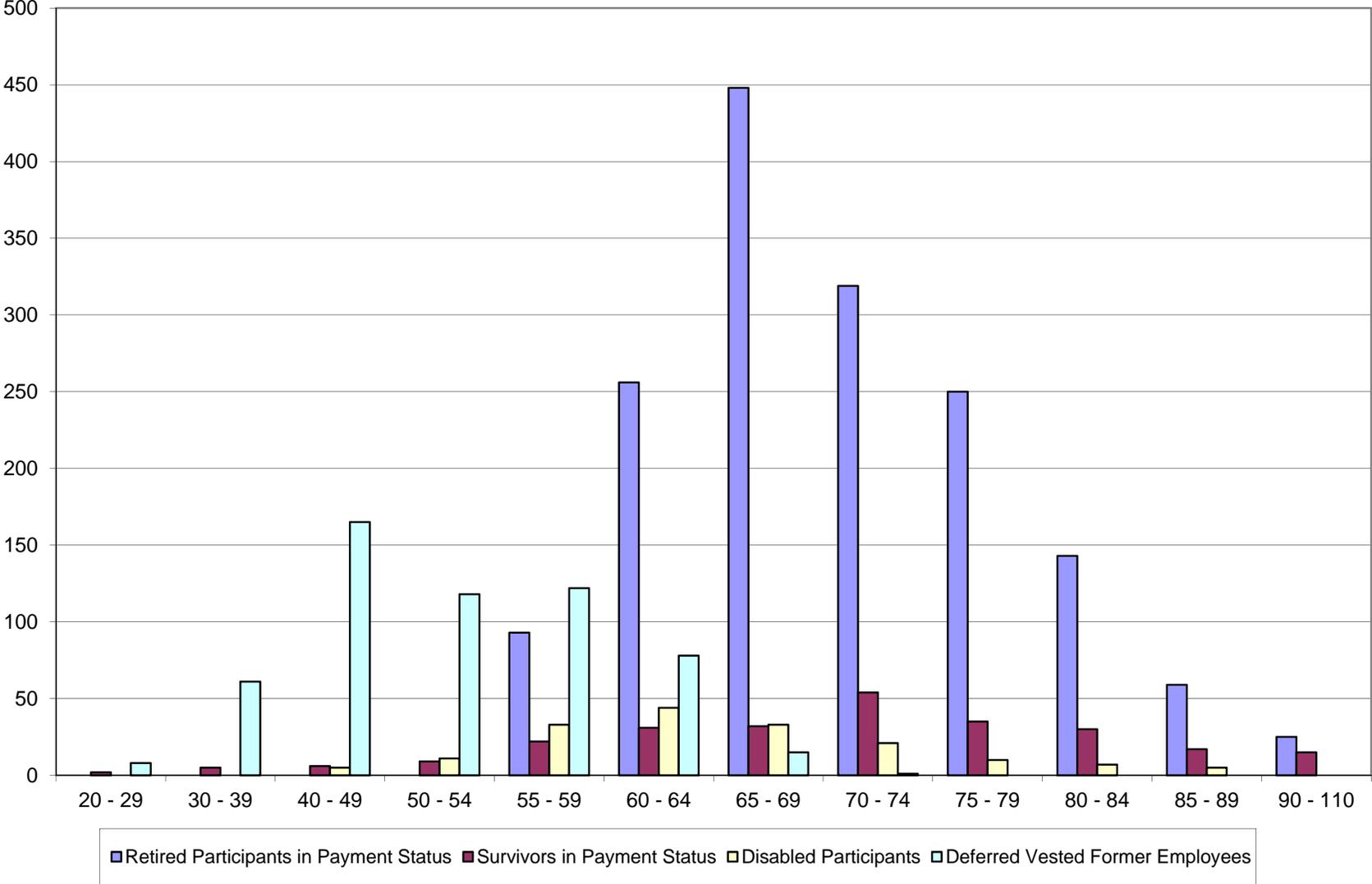
Oklahoma Municipal Retirement Fund
All Cities Combined
AGE AND SERVICE OF ACTIVE PARTICIPANTS
July 1, 2018

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	17	13,538													17	13,538
20 - 24	219	21,611	2	30,749											221	21,693
25 - 29	248	25,769	51	33,813	2	42,126									301	27,241
30 - 34	233	28,028	101	35,138	35	43,515	2	45,292							371	31,518
35 - 39	207	29,461	87	40,697	55	42,217	18	49,957							367	35,041
40 - 44	170	28,750	96	38,934	63	44,839	42	48,692	21	53,471	1	45,858			393	37,313
45 - 49	173	30,694	105	38,896	73	42,696	55	49,094	27	48,656	18	60,496	1	73,398	452	39,131
50 - 54	170	31,232	84	38,779	95	44,127	61	48,950	42	46,140	33	56,206	24	53,475	509	40,906
55 - 59	147	31,325	97	42,567	125	47,752	80	47,744	49	49,817	47	52,096	43	52,565	588	43,660
60 - 64	95	32,773	75	36,689	70	41,584	47	48,164	40	44,577	32	47,837	41	48,784	400	40,884
65 - 69	24	35,491	21	39,659	26	37,001	13	54,264	8	44,957	6	56,673	6	40,973	104	41,323
70 - 109	13	33,047	13	46,988	13	38,432	3	34,371	1	50,587	3	34,484	5	42,115	51	39,369
All Ages	1,716		732		557		321		188		140		120		3,774	

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

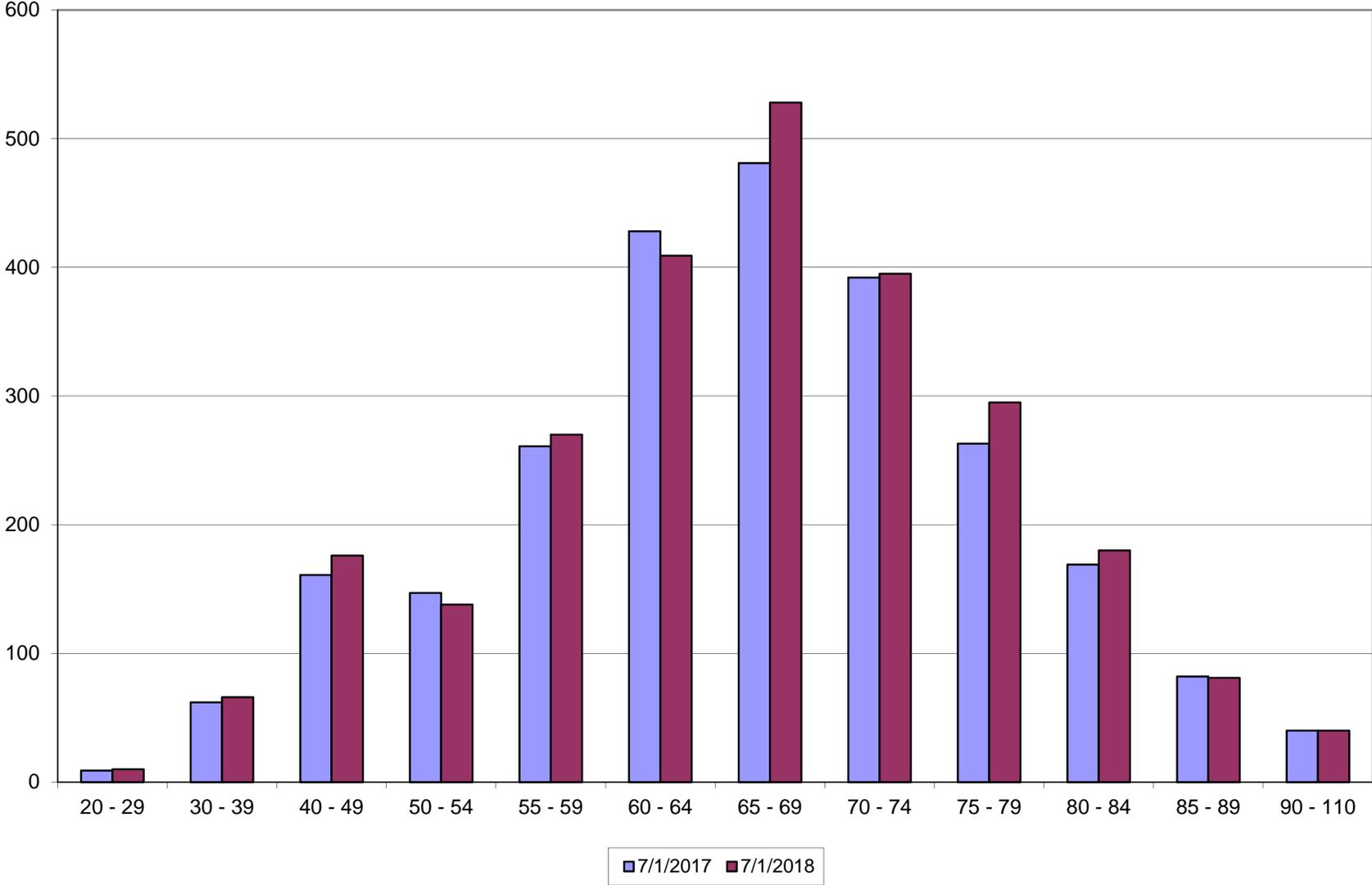
Oklahoma Municipal Retirement Fund

Distribution of Nonactive Participants by Status and Age



Oklahoma Municipal Retirement Fund

Distribution of Nonactive Participants by Age



Oklahoma Municipal Retirement Fund
All Cities Combined
SUMMARY OF NONACTIVE PARTICIPANTS

July 1, 2018

Age Group	Males			Females			Total		
	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age	Count	Benefit	Weighted Ave Age
Retired Participants in Payment Status									
50 - 54									
55 - 59	69	1,121,238	57.80	24	414,273	58.50	93	1,535,511	57.99
60 - 64	183	3,359,169	62.88	73	1,168,706	62.77	256	4,527,875	62.85
65 - 69	287	4,988,684	67.38	161	2,584,738	67.51	448	7,573,421	67.42
70 - 74	201	2,770,121	72.37	118	1,656,088	72.35	319	4,426,210	72.36
75 - 79	164	2,104,215	77.25	86	1,048,487	77.24	250	3,152,702	77.25
80 - 84	85	745,470	82.18	58	711,718	82.26	143	1,457,189	82.22
85 - 89	38	373,172	87.51	21	166,331	87.38	59	539,502	87.47
90 - 110	14	91,084	92.24	11	72,245	95.31	25	163,329	93.60
Totals	1041	15,553,154	69.28	552	7,822,586	70.67	1593	23,375,740	69.75
Ave amount		14,941			14,171			14,674	
Survivors in Payment Status									
0 - 29	1	6,850	28.76	1	11,912	26.68	2	18,762	27.44
30 - 39	2	19,112	32.28	3	19,238	36.41	5	38,350	34.35
40 - 49	2	13,207	44.21	4	33,462	43.14	6	46,669	43.44
50 - 54				9	93,669	53.05	9	93,669	53.05
55 - 59	1	12,215	56.27	21	270,159	58.06	22	282,374	57.98
60 - 64	6	74,273	62.91	25	226,273	62.88	31	300,546	62.89
65 - 69	6	43,690	67.15	26	225,868	67.10	32	269,558	67.11
70 - 74	11	175,811	71.75	43	375,063	72.48	54	550,875	72.25
75 - 79	1	1,886	78.34	34	244,172	77.86	35	246,058	77.86
80 - 84	3	30,307	83.27	27	183,125	82.32	30	213,432	82.45
85 - 89	2	27,515	86.66	15	131,447	88.02	17	158,962	87.79
90 - 110	1	3,963	92.66	14	114,428	92.52	15	118,392	92.53
Totals	36	408,830	67.83	222	1,928,816	70.47	258	2,337,646	70.01
Ave amount		11,356			8,688			9,061	
Disabled Participants									
20 - 29									
30 - 39									
40 - 49	5	40,118	45.27				5	40,118	45.27
50 - 54	10	134,265	53.41	1	27,338	54.44	11	161,603	53.58
55 - 59	27	466,585	56.95	6	91,731	57.20	33	558,316	56.99
60 - 64	33	566,923	62.56	11	131,156	61.65	44	698,079	62.39
65 - 69	26	274,199	67.45	7	69,438	68.42	33	343,636	67.64
70 - 74	15	154,822	71.65	6	85,155	71.97	21	239,977	71.77
75 - 79	9	63,683	77.13	1	18,290	77.03	10	81,973	77.10
80 - 84	4	39,529	81.86	3	34,537	82.15	7	74,066	82.00
85 - 89	4	15,901	86.18	1	10,921	88.08	5	26,822	86.96
90 - 110									
Totals	133	1,756,024	62.72	36	468,566	65.96	169	2,224,590	63.40
Ave amount		13,203			13,016			13,163	
Deferred Vested Former Employees									
20 - 29	5	17,010	28.56	3	597	23.67	8	17,606	28.39
30 - 39	39	282,928	36.81	22	121,789	35.83	61	404,717	36.51
40 - 49	102	948,886	45.95	63	528,221	45.58	165	1,477,107	45.82
50 - 54	81	777,227	52.88	37	423,089	52.77	118	1,200,316	52.84
55 - 59	78	676,275	57.28	44	355,003	57.53	122	1,031,279	57.36
60 - 64	55	473,065	62.14	23	195,326	62.55	78	668,392	62.26
65 - 69	5	7,325	65.94	10	58,219	67.94	15	65,544	67.71
70 - 74				1	35	70.26	1	35	70.26
75 - 79									
Totals	365	3,182,716	51.59	203	1,682,280	51.94	568	4,864,996	51.71
Ave amount		8,720			8,287			8,565	
Grand Totals	1575	20,900,725	66.01	1013	11,902,249	67.81	2588	32,802,973	66.66
Ave amount		13,270			11,750			12,675	