
Oklahoma Municipal Retirement Fund

ACTUARIAL VALUATION OF FUNDING REQUIREMENTS

**Effective for the Year Starting
July 1, 2024**

March 28, 2024

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, 2023, 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, 2024.

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 23, 2024

Date



Charles E. Dean, FSA, FCA
Enrolled Actuary 23-1249



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ASOP 4

What's New?

Reconciliation of Liability and Assets

A new Exhibit 5 reconciles Plan liabilities and assets from last year's report, showing the expected changes, the differences in expected and actual changes (known as actuarial gains and losses), and the effects of changes made by Plan amendment, if any.

Oklahoma Municipal Retirement Fund

RECONCILIATION OF LIABILITY AND ASSETS

	Actuarial Liability	(Actuarial Value of Assets)	Unfunded Actuarial Liability
1 Values as of 7/1/2022	\$ 714,244,822	\$ (694,652,586)	\$ 19,592,236
2 Normal cost	16,831,024		16,831,024
3 Contributions			
Employer		(19,244,083)	(19,244,083)
Employee		(8,472,736)	
4 Distributions*	(39,961,363)	40,564,203	602,840
5 Interest	<u>51,554,399</u>	<u>(49,896,595)</u>	<u>1,657,805</u>
6 Expected Values as of 7/1/2023	\$ 742,668,882	\$ (731,701,796)	\$ 10,967,086
7 Actuarial (Gain) or Loss	<u>9,267,458</u>	<u>11,568,996</u>	<u>20,836,454</u>
8 Values before Plan changes	\$ 751,936,340	\$ (720,132,800)	\$ 31,803,540
9 Effect of Plan amendment	<u>4,962,093</u>	<u>0</u>	<u>4,962,093</u>
10 Values as of 7/1/2023	\$ 756,898,434	\$ (720,132,800)	\$ 36,765,634

Low-Default-Risk Obligation Measure

The Exhibit “Risk Associated with Measuring Pension Obligations” (now Exhibit 6) introduces the concept of a “low-default-risk obligation measure” (LDRM) and compares it to the accumulated benefit obligation (ABO) that has been reported in the past. The ABO is a measure of the assets on hand that would be necessary to meet all benefit obligations that have accrued to date, reflecting the OkMRF investment policy and expected return. In contrast, the LDRM shows the increased assets on hand that would be necessary if the Plan were instead to invest only in high quality bonds in a portfolio designed to match the projected cashflows from the Plan. We have included a Fact Sheet prepared by the National Conference on Public Employee Retirement Systems that presents a clear and simple overview of LDRM. This revised standard does not impact the contribution rate or the funding status of the Plan.

Oklahoma Municipal Retirement Fund

RISK ASSOCIATED WITH MEASURING PENSION OBLIGATIONS

Demographic Risk (cont'd)

- The amortization amount (or surplus credit) is calculated as a dollar amount based on cumulative past experience. A significant change in total covered payroll (which could result from a noticeable difference in the number of active participants on the valuation date) could cause this dollar amount to represent a substantial difference when expressed as a percentage of pay.

Contribution Risk

In developing a contribution policy that balances out the various objectives of predictability, minimal volatility, and intergenerational equity, it is assumed that the municipality consistently makes the recommended contributions. Contributing less than the recommended amount will of necessity require larger contributions in the future. Consistently underfunding the Plan can cause the contribution rate to spiral out of control, seriously jeopardizing the Plan's funded status and the benefit security of its employees and retirees.

Low-Default-Risk Obligation Measure (LDROM)

Like the ABO, the low-default-risk obligation measure is a measure of only benefits accrued under the Plan to date, assuming no future benefits could be earned. However, while the ABO represents the assets that would be necessary to fund all accrued benefits if the Plan continues to accumulate investment earnings at the assumed rate of return, LDROM represents the assets that would be needed if the Plan instead invested solely in high quality bonds whose cashflows match projected benefit cashflows. See Exhibit 10 for more details on this calculation.

The \$183,191,211 difference between the LDROM and the ABO may be thought of as the expected savings resulting from investing in a well-diversified portfolio of stocks, bonds and other assets, versus investing in a portfolio of only high-quality bonds.

	<u>Diversified Portfolio ABO</u>	<u>Low Default Risk Bonds LDROM</u>
Assumed Return Approach	single assumed rate (7.25%)	yield curve (FTSE)
Liability for Accrued Benefits		
Retired, survivors and deferred vested	\$ 417,605,764	\$ 514,427,972
Active employees	<u>216,907,308</u>	<u>303,276,311</u>
Total	\$ 634,513,072	\$ 817,704,283
Market Value of Assets as of 7/1/2023	689,052,912	689,052,912
Funded status: assets over (under) liability	\$ 54,539,839	\$ (128,651,371)
Funded ratio	109%	84%

What the Low-Default-Risk Obligation Measure (LDROM) Is... And What It Is Not

The Actuarial Standards Board (ASB)¹ requires public pension plans (for plan years after February 15, 2023) to begin disclosing a new liability measure that assumes the pension plan is invested solely in high quality bonds. Public pension plans typically invest in a diversified portfolio including stocks, bonds, real estate and private equity, and funding calculations are based on the expected return of that portfolio. The new disclosure requirement does not change this approach for funding the plan but provides additional information on what the liability measurement would be if the plan were to adopt an all-bond investment strategy.

It is highly unlikely that a public pension plan would adopt an all-bond investment strategy, and there is no indication that any plans intend to do so. For that reason, the new disclosure has limited practical application for public sector plans. However, understanding this new measure – what it is and what it is not – is critically important to ensure the new disclosure is not used to mischaracterize the financial health of a pension plan.

Bottom line: LDROM shows the high cost of an all-bond portfolio and the value of a well-diversified investment strategy.

WHAT LDROM IS:

- **Low-Default Risk Obligation Measure (LDROM) is a new required disclosure of a number typically larger than a plan's funding liability.**
 - The LDROM is calculated using a discount rate based entirely on high quality bond yields instead of the expected return on the plan's diversified investment portfolio.
- **LDROM is an illustration of expected taxpayer savings.**
 - The difference between the pension liability used for funding a plan and the LDROM represents the expected savings to be achieved by investing in asset classes with higher expected returns than bonds.

WHAT LDROM IS NOT:

- **LDROM is not a measure of public pension plan funding.**
 - A public pension plan's funding target is calculated based on the board's funding policy, typically using a discount rate equal to the expected investment return on the plan's actual assets as currently invested, not on a theoretical portfolio of low-default-risk bonds.
- **LDROM is not a measure of pension plan health.**
 - This disclosure may be used to mislead stakeholders about a plan's financial health. The financial health of a pension plan depends on many factors including the size of any funding shortfall compared to the resources of the plan sponsor(s) and the strategy in place to attain 100% funding.
 - In particular, having plan assets less than the LDROM does not provide information on whether the plan will be able to make future benefit payments.

¹The Actuarial Standards Board (ASB) sets standards for appropriate actuarial practice in the United States through the development and promulgation of Actuarial Standards of Practice (ASOPs). These ASOPs describe the procedures an actuary should follow when performing actuarial services and identify what the actuary should disclose when communicating the results of those services.



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WHAT LDROM IS NOT:

- **LDROM is not the “true measure” of public pension liabilities.**
 - For many years some financial economists have claimed public pension plans are understating the value of the pension promise by not using discount rates similar to those required for the LDROM. This new disclosure requirement will likely lead to a resurgence of such claims.
 - To counter this risk of misrepresentation, the ASB specifically states that “[t]he calculation and disclosure of this additional measure [the LDROM] is not intended to suggest that this is the “right” liability measure for a pension plan.”

WHAT YOU NEED TO KNOW:

- **The LDROM may be used to mislead stakeholders, including workers, policymakers, and taxpayers about the financial health of a pension plan.**
 - The additional calculation is simply one point of additional information. In particular, it is not the one true measure of pension liability, as some may claim.
 - Assessments of the financial health of a pension plan rely on multiple measures, particularly the size of any unfunded liability compared to the resources of the sponsor and the contribution strategy to pay off any unfunded liability.
- **Funding versus LDROM**
 - Consistent with established ASB guidance, discount rates for funding public pension plans continue to reflect the expected investment return of the pension portfolio.
 - Under that approach, the LDROM would only be appropriate for funding if the plan was actually invested entirely in high quality bonds.
 - There are no indications that public plans intend to shift to investing entirely in bonds, so the LDROM should not be viewed as an appropriate funding target or a reasonable basis for developing adequate contributions for ongoing public pension plans.
- **The difference between LDROM and a plan’s funding liability can be used to illustrate the advantage of investing in the plan’s diversified portfolio.**
 - The difference between the funding liability and the LDROM represents the expected savings for plan sponsors, employers, taxpayers, and participants from investing in the plan’s diversified portfolio instead of an all-bond portfolio.
 - The difference also represents the approximate cost to plan sponsors, employers, taxpayers, and participants of lowering investment risk by investing entirely in an all-bond portfolio.
- **Using a discount rate based on current bond yields makes LDROM a volatile liability measurement.**
 - Long-term bond yields, on which the LDROM discount rate is based, can vary significantly from year to year. In contrast, the expected return on assets, on which the discount rate is based for funding, is relatively stable from year to year. As a result of its more volatile discount rate, the LDROM will also be volatile, especially when compared to the funding liability.
- **The LDROM is not based on a realistic bond portfolio.**
 - The cash flows from the LDROM portfolio must reasonably approximate the future benefit payments from the pension plan. In practice, this means that the LDROM portfolio will be a much longer duration bond portfolio than is typically used as a part of the plan’s diversified portfolio.
 - The LDROM portfolio is restricted to high quality bonds – typically US Treasuries or high-quality corporate bonds.



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This toolkit has been endorsed by GFOA.

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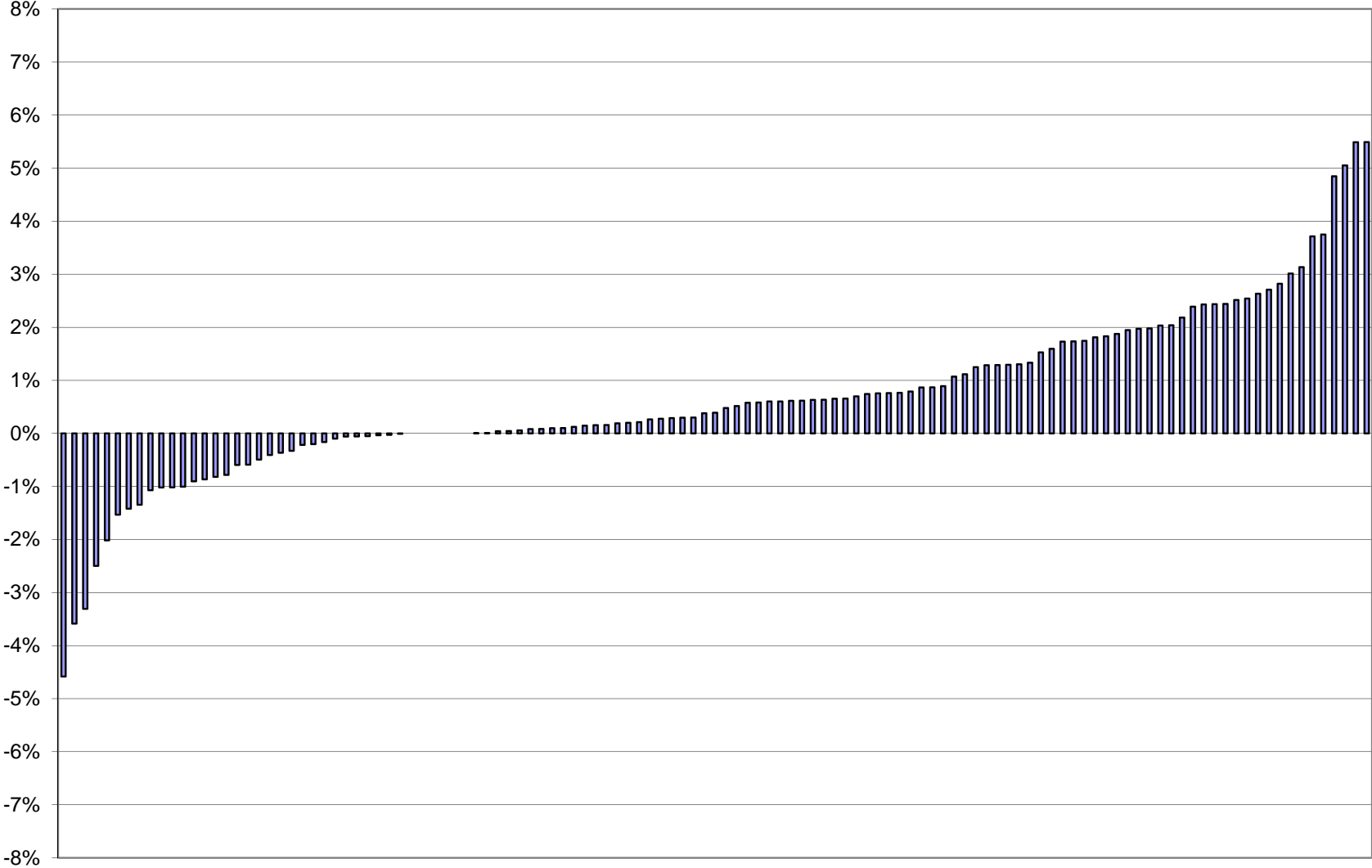
A Comparison of Required Contribution Rates

The exhibit in this section shows the required contribution rates determined by the July 1, 2023 actuarial valuation. These rates will be in effect from July 1, 2024 through June 30, 2025. 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, 2023 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, 2022 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 2024-2025 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 from July 1, 2023 to July 1, 2024
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
		7/1/2023	7/1/2024			
Adair	Surplus	5.45%	6.75%	4.50%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade
Altus	UAL	14.34%	15.08%	4.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, no COLA	
Alva	Surplus	4.25%	4.77%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Antlers	Surplus	6.61%	8.34%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade, ee cont
Ardmore	Surplus	11.18%	11.94%	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	21.81%	22.03%	6.00%	Plan BAR, normal retirement age 65, 7 year vesting, 0 years certain, no COLA	
Bethany	Surplus	9.11%	11.05%	6.00%	Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, split COLA, Hybrid	
Billings	Surplus	3.75%	3.75%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Binger	UAL	4.71%	7.22%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade, ee cont
Blackwell	Surplus	10.61%	11.23%	4.50%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	lump sum elig frozen
Blair	UAL	9.66%	11.53%	3.41%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Boise City	Surplus	1.54%	5.25%	0.00%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	upgrade
Bokchito	UAL	7.11%	7.05%	3.00%	Plan CC, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Braman	UAL		31.64%	6.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Bristow	UAL	11.70%	17.19%	6.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, COLA	upgrade, ee cont
Broken Bow	UAL	12.40%	13.03%	6.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Buffalo	UAL	10.22%	11.81%	3.50%	Plan AA, normal retirement age 62/30, 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
		7/1/2023	7/1/2024			
Burns Flat	UAL	10.40%	9.62%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Calera	UAL	6.36%	6.51%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Central Oklahoma MCD	Surplus	12.23%	14.41%	6.00%	Plan AAA, Rule of 80, 7 year vesting, 5 years certain, COLA	
Chandler	UAL	5.52%	11.01%	5.25%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	upgrade, ee cont
Checotah	UAL	7.45%	7.51%	3.75%	Plan CC, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Cherokee & CDA	UAL	7.41%	7.68%	3.00%	Plan A, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Chickasha	Surplus	7.38%	10.52%	4.00%	Plan AAA, normal retirement age 65, 10 year vesting, 10 years certain, COLA	
Claremore	UAL	7.46%	12.31%	6.00%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA; 7/10 New Hires: Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Cleo Springs	Surplus		3.73%	3.73%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Cleveland	UAL	21.25%	16.66%	6.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Clinton	Surplus	10.18%	12.81%	5.25%	Plan AAA, normal retirement age 62/30, 7 year vesting, 10 years certain, COLA	
Collinsville	UAL	10.63%	11.92%	4.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Copan	UAL	5.43%	6.19%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Cordell	Surplus	2.02%	0.00%	0.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Cushing	UAL	8.26%	10.23%	0.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, no COLA	
Davis	UAL	8.51%	9.80%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Del City	UAL	24.57%	24.77%	8.00%	Plan AAA, special retirement age, 7 year vesting, 10 years certain, split COLA, Hybrid; 7/20 new hires: Plan AAA, 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
		7/1/2023	7/1/2024			
Dewey	UAL	12.03%	12.82%	4.00%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Drumright	UAL	12.67%	12.68%	6.00%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Durant	Surplus	7.95%	7.08%	5.00%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, split COLA	
El Reno	UAL	10.78%	10.29%	4.50%	Plan BB, special retirement age, 7 year vesting, 5 years certain, no COLA	
Eufaula	Surplus	5.58%	6.83%	3.75%	Plan CC, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Fort Cobb	UAL	8.21%	8.36%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Foss Reservoir Public Works	UAL	12.17%	13.50%	3.75%	Plan BB, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Frederick	Surplus	6.77%	6.71%	4.33%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Garber	UAL	10.78%	11.65%	3.75%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Geary	Surplus	6.60%	6.87%	2.06%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Goodwell	Surplus	3.00%		3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Gore and Gore PWA	UAL	8.78%	10.59%	3.75%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Granite	UAL	14.00%	13.84%	4.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Guthrie	UAL	9.95%	10.70%	3.69%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Harrah	UAL	19.18%	19.18%	5.25%	Plan AA, Rule of 80, 5 year vesting, 5 years certain, no COLA; 1-2019: Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Healdton	UAL	14.31%	14.97%	6.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Henryetta	UAL	16.77%	19.21%	5.25%	Plan AA, 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
		7/1/2023	7/1/2024			
Hooker	UAL	15.87%	14.53%	4.25%	Plan AA, normal retirement age 65, 5 year vesting, 10 years certain, no COLA	
Hulbert	Surplus	3.75%	3.75%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Hydro	Surplus	7.26%	6.25%	3.75%	Plan CC, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Kansas	UAL	3.08%	3.12%	1.50%	Plan C, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Kiefer	UAL	8.39%	12.14%	3.75%	Plan CC, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	upgrade, ee cont
Kingston	Surplus	6.46%	6.65%	3.75%	Plan CC, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Krebs & Krebs Utility Auth.	UAL	7.86%	8.51%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Laverne	Surplus	7.62%	6.72%	3.75%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Lindsay	Surplus	6.16%	7.99%	3.75%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, COLA	
Madill	UAL	11.45%	12.75%	5.25%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Mannford	UAL	18.53%	17.51%	6.00%	Plan AAA, Rule of 80, 5 year vesting, 5 years certain, no COLA	
Marietta	Surplus	10.10%	9.51%	5.25%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Marietta PWA	UAL	23.53%	20.23%	5.00%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
McCloud	UAL	11.49%	12.07%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Medford	UAL	13.39%	13.29%	4.00%	Plan AA, normal retirement age 62/30, 10 year vesting, 10 years certain, split COLA, Hybrid	
Meeker	Surplus	10.11%	10.21%	3.00%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Miami	UAL	9.35%	11.89%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 10 years certain, no COLA	upgrade, ee cont

Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2023	7/1/2024			
Mooreland	UAL	12.27%	12.55%	4.00%	Plan AA, Rule of 80, 5 year vesting, 5 years certain, no COLA	
Mountain Park MCD	UAL	32.18%	31.59%	6.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Muldrow	UAL	12.81%	13.42%	4.50%	Plan BB, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Mustang	UAL	14.51%	15.13%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Nichols Hills	Surplus	15.49%	16.19%	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, Hybrid	
Noble	UAL	10.57%	12.96%	5.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Nowata	Surplus	9.37%	11.41%	5.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Oilton	Surplus	6.62%	7.01%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Okeene	UAL	10.10%	11.63%	3.60%	Plan AAA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Okemah	UAL	9.33%	8.32%	3.75%	Plan CC, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Oklahoma Municipal League	Surplus	11.38%	14.39%	0.00%	Plan AAA, normal retirement age 65, 5 year vesting, 5 years certain, COLA; Part-timers: Plan AAA, normal retirement age 65, 0 year vesting, 5 years certain, COLA	
OkMRF Staff	UAL	14.66%	14.63%	4.50%	Plan BB (AA after 15 years), normal retirement age 65, 5 year vesting, 10 years certain, no COLA	
Okmulgee	Surplus	7.16%	7.13%	0.00%	Plan AA, special retirement age, 10 year vesting, 5 years certain, COLA	
Owasso	UAL	11.95%	13.06%	4.26%	Plan AA, normal retirement age 62/30, 5 year vesting, 5 years certain, no COLA	
Pawnee	Surplus	8.71%	7.29%	6.00%	Plan AAA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA	
Perkins	Surplus	7.26%	7.04%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, COLA	
Perry	UAL	9.20%	10.95%	4.00%	Plan AA, normal retirement age 65, 10 year vesting, 10 years certain, no COLA	

Oklahoma Municipal Retirement Fund
COMPARISON OF REQUIRED CONTRIBUTION RATES

City	UAL or Surplus	Total rate		Employee Rate	Plan Provisions	Changes
		7/1/2023	7/1/2024			
Piedmont	UAL	4.70%	7.14%	3.75%	Plan CC, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade, ee cont
Pond Creek	UAL	21.24%	21.54%	6.00%	Plan AAA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Porum	Surplus	3.31%	3.35%	2.25%	Plan B, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Poteau	UAL	10.59%	10.38%	4.25%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Ratliff City	UAL	5.94%	5.93%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Ringling	UAL	7.77%	7.89%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Roland	UAL	12.32%	9.82%	4.50%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Sallisaw	UAL	16.41%	17.05%	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	4.90%	4.90%	4.90%	Plan AA, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Shawnee	UAL	12.29%	17.34%	4.25%	Plan AA, Rule of 80, 7 year vesting, 10 years certain, split COLA, Hybrid	
Skiatook	Surplus	10.49%	9.42%	4.50%	Plan BB, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Spencer	Surplus	5.25%	5.25%	5.25%	Plan AA, normal retirement age 62/30, 7 year vesting, 5 years certain, no COLA, Hybrid	
Spiro	Surplus	6.16%	5.75%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Stilwell	UAL	9.13%	10.02%	4.50%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Stratford	Surplus	2.00%	2.00%	2.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Stroud	UAL	10.03%	10.90%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Sulphur	UAL	18.46%	18.76%	5.00%	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
		7/1/2023	7/1/2024			
Talihina & TPWA	UAL	12.50%	12.88%	4.50%	Plan BB, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Thomas	UAL	18.16%	20.98%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Tipton	UAL	9.90%	10.50%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Tishomingo	UAL	7.76%	7.84%	3.75%	Plan CC, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Tonkawa	Surplus	8.06%	10.09%	3.50%	Plan AAA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Valliant	UAL	14.32%	14.27%	3.00%	Plan A, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Velma	Surplus	3.75%	3.83%	3.75%	Plan BB, normal retirement age 65, 5 year vesting, 5 years certain, no COLA	
Vian	UAL	12.72%	12.35%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Vinita	UAL	15.60%	17.34%	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	13.62%	14.21%	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	14.13%	12.59%	4.00%	Plan AAA, normal retirement age 62/30, 10 year vesting, 5 years certain, no COLA	
Waukomis	Surplus	8.37%	7.55%	5.25%	Plan AA, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	
Waurika	Surplus	9.49%	11.47%	4.00%	Plan AAA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Weatherford	UAL	12.79%	12.47%	6.25%	Plan AA, normal retirement age 65, 7 year vesting, 5 years certain, no COLA	
Webbers Falls	Surplus	3.02%	5.46%	3.00%	Plan A, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade, ee cont
Wellston	Surplus	6.35%	2.77%	0.00%	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
		7/1/2023	7/1/2024			
Westville Utility Authority	Surplus	10.74%	10.89%	7.68%	Plan AAA, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Wetumka	UAL	13.14%	13.24%	5.25%	Plan AA, Rule of 80, 10 year vesting, 5 years certain, no COLA	
Wilburton	UAL	4.26%	6.97%	2.25%	Plan B, normal retirement age 65, 10 year vesting, 5 years certain, no COLA	upgrade, ee cont
Yale	Surplus	13.14%	14.21%	6.00%	Plan AAA, Rule of 80, 7 year vesting, 5 years certain, no COLA	
Yukon	UAL	18.24%	18.72%	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		11.49%	12.35%	4.69%		

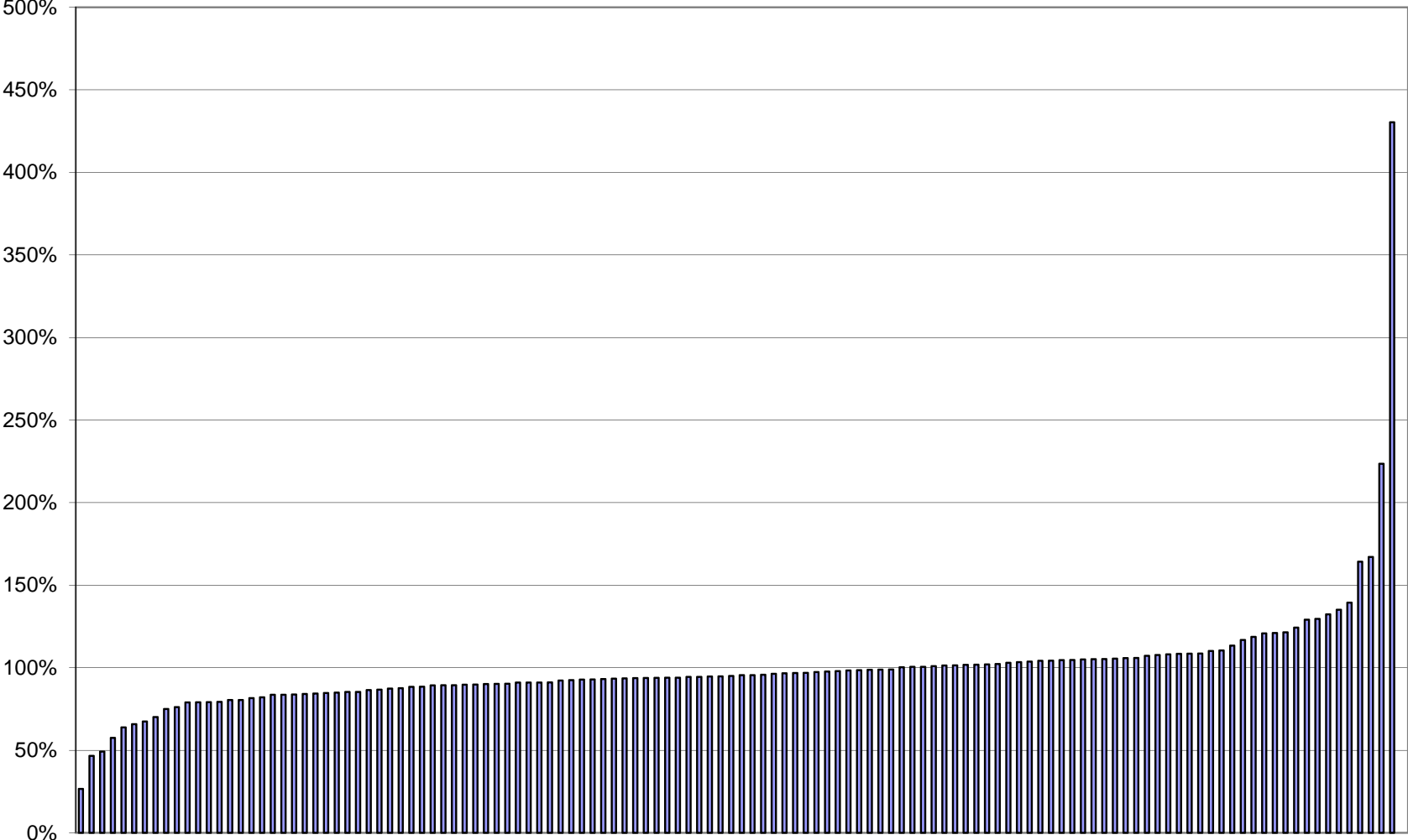
B Comparison of Plan Assets and Obligations

The exhibit in this section shows the plan assets and obligations as of July 1, 2023, 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 2023 to employees who were active participants on July 1, 2023. Pay for employees who worked less than a full year in fiscal 2023 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, 2023, 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, 2023, discounted to the valuation date at the assumed rate of return (7.25% for all plans).

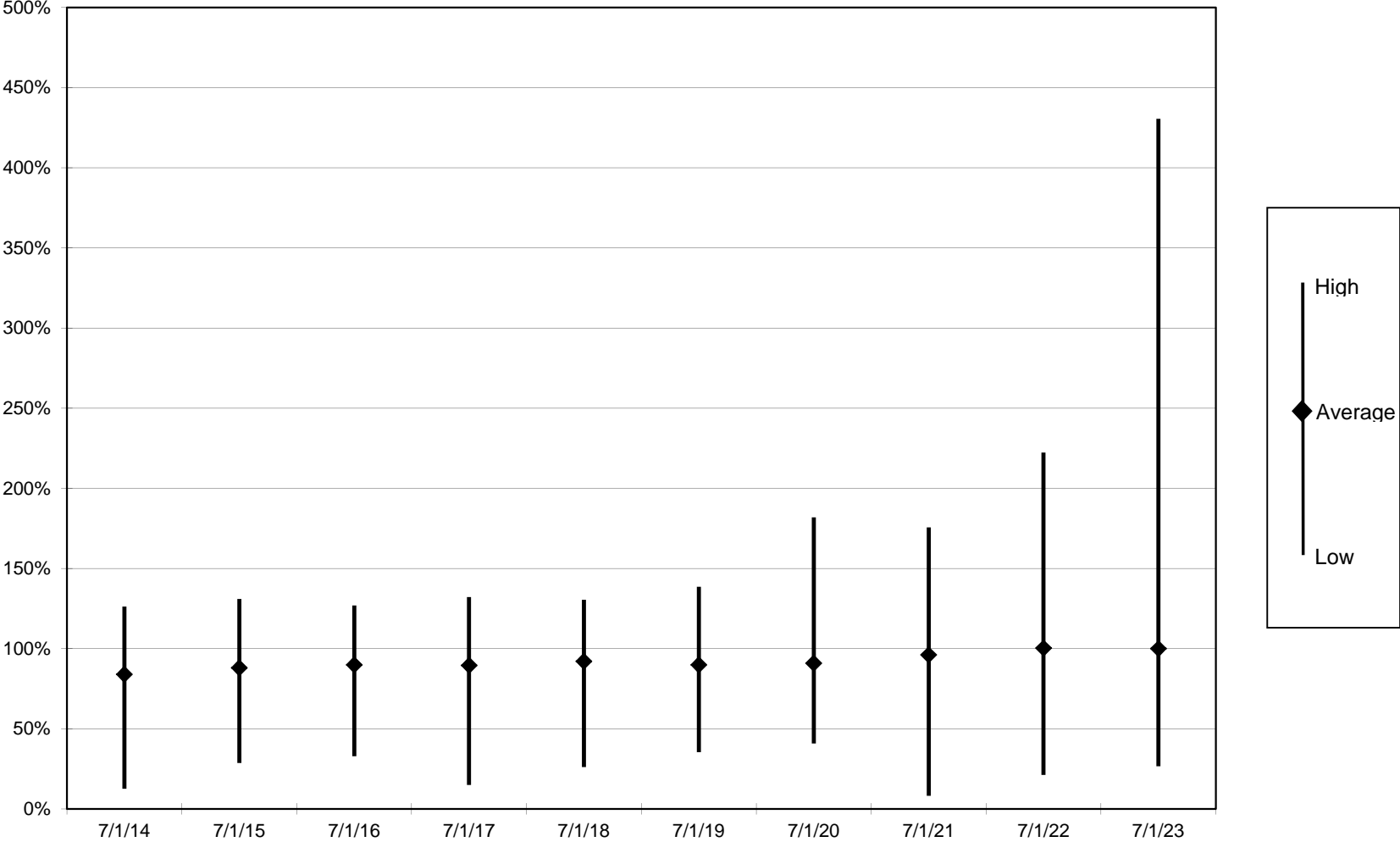
Oklahoma Municipal Retirement Fund

Funded Ratio as of 7/1/2023



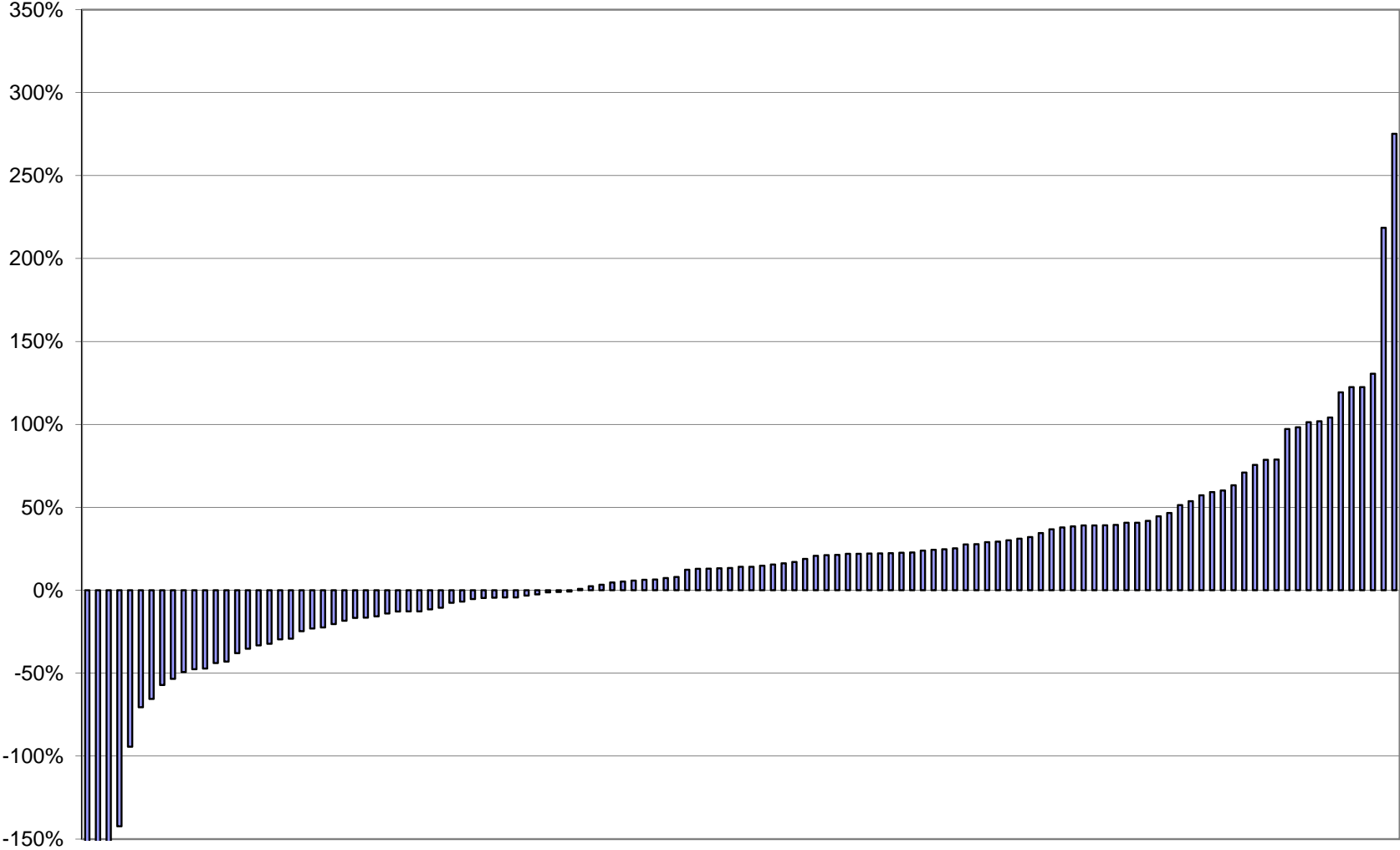
Oklahoma Municipal Retirement Fund

Funded Ratios

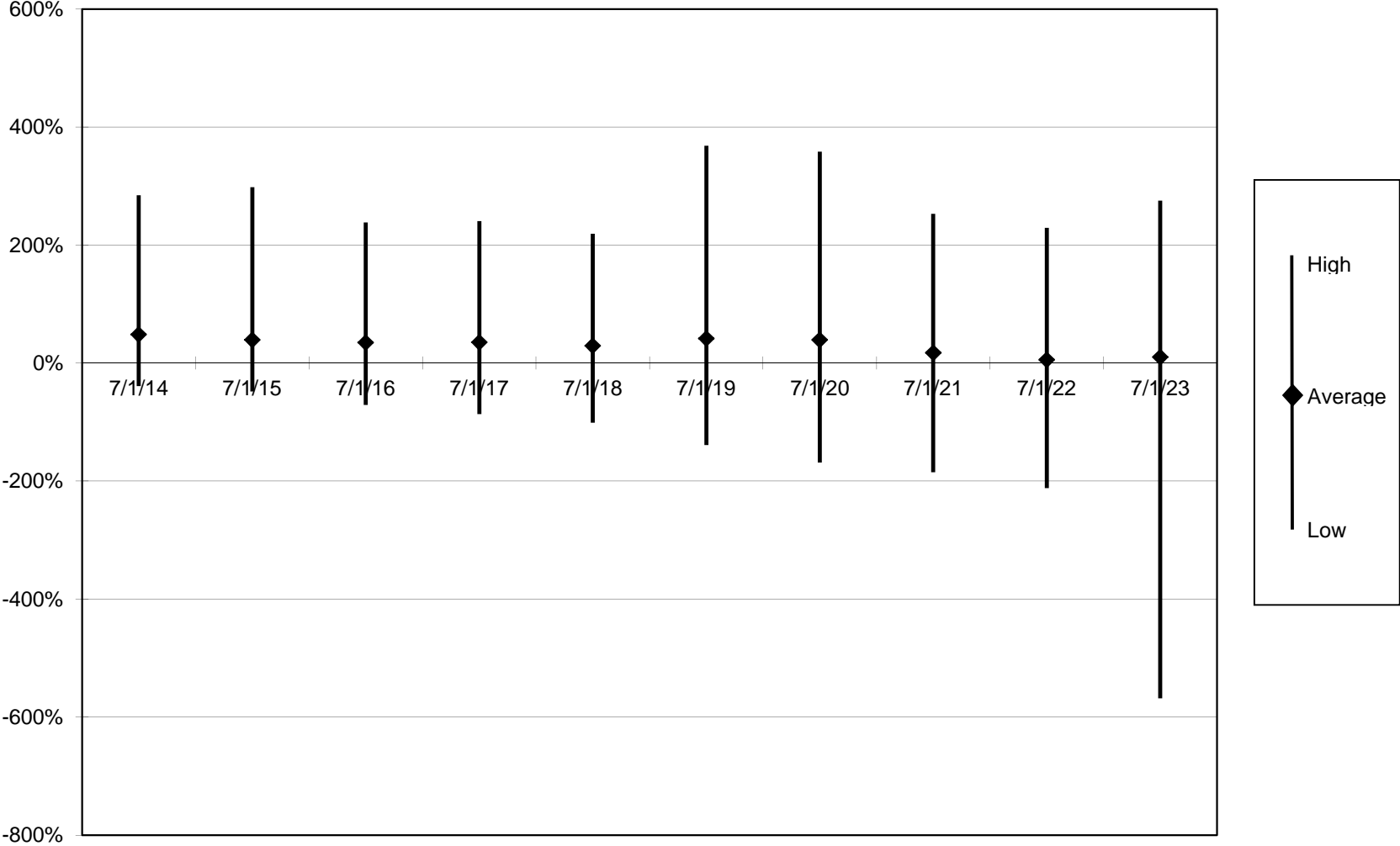


Oklahoma Municipal Retirement Fund

UAAL as Percent of Covered Payroll as of 7/1/2023



UAAL as Percent of Covered Payroll



Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Adair	Surplus	376,324	287,797	279,285	193,989	309,891	(66,432)	121.4%	(23.1)%	8	4	263,288
Altus	UAL	24,302,346	7,501,651	17,872,609	16,491,796	29,052,528	4,750,182	83.6%	63.3%	170	95	24,218,675
Alva	Surplus	5,800,422	2,046,159	3,619,135	2,622,858	5,341,959	(458,463)	108.6%	(22.4)%	41	23	4,434,369
Antlers	Surplus	1,814,567	1,291,710	1,663,542	930,405	1,754,700	(59,867)	103.4%	(4.6)%	36	15	1,331,670
Ardmore	Surplus	44,353,990	9,286,992	32,808,279	18,471,094	43,950,168	(403,822)	100.9%	(4.3)%	164	107	35,430,766
Bartlesville	UAL	26,431,844	4,246,599	15,042,285	16,935,080	28,160,825	1,728,982	93.9%	40.7%	73	169	28,160,825
Bethany	Surplus	28,684,023	3,528,019	11,596,859	19,310,124	28,190,677	(493,345)	101.8%	(14.0)%	67	62	25,352,719
Billings	Surplus	296,077	88,762	78,249	178,636	212,385	(83,693)	139.4%	(94.3)%	3	3	196,356
Binger	UAL	261,499	229,854	195,479	186,073	310,109	48,610	84.3%	21.1%	7	2	263,518
Blackwell	Surplus	6,754,263	2,267,837	5,197,197	3,448,569	6,657,109	(97,154)	101.5%	(4.3)%	55	33	5,430,662
Blair	UAL	790,852	129,900	565,342	343,900	842,031	51,179	93.9%	39.4%	3	2	689,088
Boise City	Surplus	1,864,641	439,239	1,010,214	924,738	1,718,751	(145,890)	108.5%	(33.2)%	12	15	1,543,882
Bokchito	UAL	254,697	350,071	370,540	58,734	257,517	2,820	98.9%	0.8%	11	1	175,299
Braman	UAL	129,653	53,881	21,915	272,533	277,918	148,266	46.7%	275.2%	1	2	273,481
Bristow	UAL	4,439,219	1,045,782	3,486,013	2,291,553	4,670,761	231,542	95.0%	22.1%	31	15	3,657,596
Broken Bow	UAL	8,777,951	2,893,888	7,879,673	3,654,825	9,272,347	494,396	94.7%	17.1%	66	25	7,280,800
Buffalo	UAL	1,163,835	260,508	852,526	524,809	1,200,761	36,926	96.9%	14.2%	8	5	1,000,718
Burns Flat	UAL	1,009,447	347,201	642,069	646,598	1,129,170	119,723	89.4%	34.5%	9	5	965,616

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Calera	UAL	1,546,200	852,824	983,370	963,393	1,599,893	53,693	96.6%	6.3%	19	9	1,286,118
Central Oklahoma MCD	Surplus	2,496,156	498,228	2,162,600	598,599	2,258,882	(237,274)	110.5%	(47.6)%	7	4	1,744,726
Chandler	UAL	4,307,412	1,085,022	3,825,486	1,160,705	4,358,731	51,319	98.8%	4.7%	24	13	3,542,535
Checotah	UAL	3,454,436	1,752,723	2,447,094	2,058,267	3,512,932	58,495	98.3%	3.3%	45	26	2,792,328
Cherokee & CDA	UAL	565,930	520,328	597,571	306,077	630,453	64,524	89.8%	12.4%	12	9	471,277
Chickasha	Surplus	19,250,559	2,811,730	7,666,045	13,111,057	18,184,527	(1,066,032)	105.9%	(37.9)%	67	50	16,283,595
Claremore	UAL	23,007,349	8,199,955	19,493,637	11,929,383	24,876,481	1,869,132	92.5%	22.8%	158	85	18,974,975
Cleo Springs	Surplus	133,570	18,035	8,279	28,636	31,036	(102,535)	430.4%	(568.5)%	1	2	29,981
Cleveland	UAL	3,111,956	775,704	1,706,692	2,496,877	3,662,792	550,836	85.0%	71.0%	17	16	3,268,249
Clinton	Surplus	16,481,407	1,890,449	6,367,175	11,240,604	15,652,170	(829,236)	105.3%	(43.9)%	44	63	13,943,132
Collinsville	UAL	4,682,390	2,358,999	5,516,080	1,308,107	5,211,523	529,133	89.8%	22.4%	50	16	3,834,169
Copan	UAL	118,349	223,280	177,456	71,028	205,856	87,507	57.5%	39.2%	4	3	167,359
Cordell	Surplus	5,992,552	708,199	1,996,797	3,389,967	4,820,000	(1,172,552)	124.3%	(165.6)%	17	29	4,397,320
Cushing	UAL	23,615,640	4,318,727	12,542,228	14,607,874	24,513,391	897,752	96.3%	20.8%	91	107	20,645,216
Davis	UAL	2,927,104	1,196,213	1,965,402	1,727,052	3,023,315	96,210	96.8%	8.0%	26	21	2,682,872
Del City	UAL	22,769,727	4,506,170	13,932,986	18,768,048	28,287,044	5,517,317	80.5%	122.4%	95	87	24,789,683
Dewey	UAL	2,731,295	577,227	2,530,714	750,719	2,890,867	159,572	94.5%	27.6%	15	8	2,135,272
Drumright	UAL	2,906,367	625,288	1,421,618	2,173,313	3,150,623	244,256	92.2%	39.1%	16	26	2,785,503

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Durant	Surplus	29,755,345	6,335,043	14,048,312	17,664,420	27,521,133	(2,234,212)	108.1%	(35.3)%	137	116	24,104,892
El Reno	UAL	7,800,175	3,115,456	5,802,017	4,765,115	8,571,175	771,000	91.0%	24.7%	55	45	6,717,269
Eufaula	Surplus	1,658,232	792,249	1,135,502	823,234	1,462,533	(195,699)	113.4%	(24.7)%	20	9	1,179,346
Fort Cobb	UAL	280,744	139,127	80,951	268,256	311,361	30,617	90.2%	22.0%	4	2	295,851
Foss Reservoir Public Works	UAL	1,160,779	290,556	1,170,090	378,444	1,380,449	219,670	84.1%	75.6%	4	3	950,450
Frederick	Surplus	5,515,385	1,303,757	3,220,138	2,737,193	5,249,979	(265,406)	105.1%	(20.4)%	34	23	4,448,357
Garber	UAL	210,843	182,067	373,028	10,049	281,043	70,200	75.0%	38.6%	5	1	130,007
Geary	Surplus	2,132,969	871,771	1,446,420	1,014,196	1,989,117	(143,852)	107.2%	(16.5)%	22	10	1,544,292
Goodwell	Surplus	349,559	0	0	212,814	212,814	(136,746)	164.3%		0	5	212,814
Gore and Gore PWA	UAL	1,201,865	791,842	1,381,076	527,051	1,371,104	169,239	87.7%	21.4%	27	8	934,823
Granite	UAL	2,062,722	362,696	963,069	1,425,716	2,110,982	48,260	97.7%	13.3%	8	5	1,932,726
Guthrie	UAL	8,233,292	2,718,599	6,751,163	3,800,769	8,597,649	364,357	95.8%	13.4%	58	25	6,468,893
Harrah	UAL	3,905,551	907,588	3,017,366	2,410,233	4,788,081	882,530	81.6%	97.2%	20	17	4,103,400
Healdton	UAL	2,062,092	579,212	1,884,826	867,220	2,208,823	146,730	93.4%	25.3%	13	8	1,740,325
Henryetta	UAL	4,577,018	1,920,422	6,043,145	1,761,170	6,523,105	1,946,087	70.2%	101.3%	38	16	4,529,628
Hooker	UAL	1,471,759	491,554	830,901	1,261,779	1,724,274	252,515	85.4%	51.4%	11	11	1,511,181
Hulbert	Surplus	1,128,320	538,391	798,527	351,195	874,139	(254,181)	129.1%	(47.2)%	10	5	633,125
Hydro	Surplus	430,486	240,228	229,590	310,911	417,828	(12,658)	103.0%	(5.3)%	6	4	362,829

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Kansas	UAL	184,925	325,073	185,440	91,531	208,886	23,961	88.5%	7.4%	8	5	150,051
Kiefer	UAL	260,437	281,601	502,947	53,441	386,052	125,615	67.5%	44.6%	7	3	246,430
Kingston	Surplus	858,637	571,275	502,933	666,544	854,251	(4,386)	100.5%	(0.8)%	16	7	753,197
Krebs & Krebs Utility Auth.	UAL	806,435	657,178	1,118,807	179,046	952,431	145,996	84.7%	22.2%	14	4	623,352
Laverne	Surplus	1,731,758	529,335	1,050,630	920,308	1,634,712	(97,046)	105.9%	(18.3)%	14	13	1,277,848
Lindsay	Surplus	6,106,053	1,606,914	3,278,341	3,633,894	5,630,688	(475,365)	108.4%	(29.6)%	34	23	4,660,510
Madill	UAL	4,390,369	1,238,486	3,880,421	1,621,213	4,686,626	296,257	93.7%	23.9%	29	13	3,719,467
Mannford	UAL	4,492,806	1,812,402	4,881,973	2,303,954	5,583,191	1,090,385	80.5%	60.2%	32	20	4,404,983
Marietta	Surplus	1,597,530	694,903	1,306,609	759,941	1,566,168	(31,362)	102.0%	(4.5)%	18	13	1,215,798
Marietta PWA	UAL	666,606	315,849	878,666	390,875	1,043,367	376,761	63.9%	119.3%	7	5	757,061
McLoud	UAL	1,230,902	890,061	1,494,946	608,616	1,288,981	58,079	95.5%	6.5%	25	15	884,364
Medford	UAL	3,972,428	464,530	1,745,089	2,571,206	4,033,038	60,610	98.5%	13.0%	11	8	3,513,510
Meeker	Surplus	927,444	499,030	679,286	544,291	889,768	(37,676)	104.2%	(7.5)%	13	13	740,802
Miami	UAL	14,587,846	6,017,750	11,164,479	9,535,761	16,866,976	2,279,130	86.5%	37.9%	129	106	13,913,686
Mooreland	UAL	1,588,765	534,435	885,207	1,286,765	1,706,233	117,468	93.1%	22.0%	10	8	1,422,274
Mountain Park MCD	UAL	1,228,993	291,667	848,198	1,274,595	1,866,389	637,396	65.8%	218.5%	5	3	1,582,339
Muldrow	UAL	2,834,653	1,039,509	2,201,970	1,852,148	3,269,249	434,596	86.7%	41.8%	23	19	2,593,714
Mustang	UAL	10,059,028	2,932,456	8,460,506	4,926,274	11,252,021	1,192,993	89.4%	40.7%	45	22	8,991,606

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Nichols Hills	Surplus	11,686,275	3,133,268	7,445,635	5,713,209	11,163,148	(523,126)	104.7%	(16.7)%	44	24	9,581,783
Noble	UAL	3,500,032	1,068,703	2,945,738	1,620,754	3,741,530	241,498	93.5%	22.6%	23	12	2,914,265
Nowata	Surplus	3,175,286	1,304,547	2,968,943	1,153,582	3,008,603	(166,683)	105.5%	(12.8)%	32	28	2,222,039
Oilton	Surplus	559,339	238,998	443,438	229,511	531,873	(27,465)	105.2%	(11.5)%	7	4	396,231
Okeene	UAL	1,390,837	339,084	823,347	818,387	1,408,622	17,785	98.7%	5.2%	7	8	1,185,352
Okemah	UAL	2,466,677	1,125,479	1,826,114	1,344,584	2,612,560	145,883	94.4%	13.0%	28	16	2,206,493
Oklahoma Municipal League	Surplus	8,634,820	912,651	2,378,109	7,182,043	8,518,548	(116,271)	101.4%	(12.7)%	13	25	7,764,262
OkMRF Staff	UAL	2,532,936	791,943	2,972,038	330,903	2,779,427	246,491	91.1%	31.1%	10	4	2,120,105
Okmulgee	Surplus	21,254,948	2,926,376	12,281,763	10,005,589	20,310,687	(944,261)	104.6%	(32.3)%	79	70	16,559,001
Owasso	UAL	26,924,725	9,577,746	26,898,880	9,632,246	29,589,528	2,664,803	91.0%	27.8%	160	86	21,551,959
Pawnee	Surplus	3,914,524	987,868	2,503,327	1,726,117	3,350,035	(564,489)	116.9%	(57.1)%	26	21	2,805,454
Perkins	Surplus	1,661,523	535,365	999,773	758,339	1,375,790	(285,733)	120.8%	(53.4)%	13	14	1,104,315
Perry	UAL	5,778,741	2,296,241	5,415,511	2,454,985	6,151,730	372,989	93.9%	16.2%	49	20	4,373,648
Piedmont	UAL	988,176	1,353,689	1,567,143	257,598	1,179,665	191,489	83.8%	14.1%	26	5	804,727
Pond Creek	UAL	1,851,739	401,469	1,568,138	1,131,759	2,343,511	491,772	79.0%	122.5%	9	5	1,797,205
Porum	Surplus	667,088	481,641	579,948	191,484	605,673	(61,415)	110.1%	(12.8)%	10	5	445,643
Poteau	UAL	8,151,657	1,839,909	4,899,308	4,737,417	8,690,634	538,977	93.8%	29.3%	51	36	7,458,151
Ratliff City	UAL	236,244	273,512	290,704	89,013	276,718	40,474	85.4%	14.8%	6	2	191,072

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Ringling	UAL	255,373	266,084	342,691	94,124	335,489	80,116	76.1%	30.1%	6	2	243,897
Roland	UAL	2,304,858	1,757,139	3,115,159	532,104	2,637,055	332,197	87.4%	18.9%	34	11	1,898,485
Sallisaw	UAL	21,406,874	5,331,935	17,809,342	11,952,311	25,602,167	4,195,293	83.6%	78.7%	119	65	20,766,317
Seiling	Surplus	1,315,812	240,536	513,428	458,851	787,420	(528,393)	167.1%	(219.7)%	6	5	672,126
Shawnee	UAL	38,464,361	1,039,499	5,281,808	34,824,771	39,283,534	819,173	97.9%	78.8%	30	118	37,553,208
Skiatook	Surplus	3,229,129	2,381,579	3,511,383	1,256,235	3,171,257	(57,872)	101.8%	(2.4)%	43	25	2,418,777
Spencer	Surplus	1,337,497	619,154	892,752	552,856	1,032,170	(305,326)	129.6%	(49.3)%	15	12	886,499
Spiro	Surplus	1,462,133	622,043	597,264	1,106,451	1,454,247	(7,886)	100.5%	(1.3)%	18	18	1,354,660
Stilwell	UAL	10,746,023	3,394,085	7,191,034	6,543,525	11,574,226	828,204	92.8%	24.4%	76	54	9,073,751
Stratford	Surplus	418,426	352,976	195,977	124,160	187,205	-231,221	223.5%	(65.5)%	10	3	154,925
Stroud	UAL	4,944,812	1,503,261	4,096,314	2,110,943	5,177,944	233,132	95.5%	15.5%	34	29	4,027,178
Sulphur	UAL	6,709,562	1,492,535	5,470,360	3,738,770	8,175,958	1,466,395	82.1%	98.2%	29	20	6,609,130
Talihina & TPWA	UAL	1,214,391	558,883	1,561,752	295,048	1,534,353	319,962	79.1%	57.3%	16	5	1,175,627
Thomas	UAL	1,189,568	240,848	1,026,194	650,147	1,504,055	314,488	79.1%	130.6%	6	10	1,190,595
Tipton	UAL	364,639	177,313	289,745	253,029	459,854	95,215	79.3%	53.7%	5	2	383,825
Tishomingo	UAL	764,482	855,021	866,385	361,685	785,148	20,666	97.4%	2.4%	25	9	588,257
Tonkawa	Surplus	3,369,611	1,023,145	2,205,655	1,926,763	3,359,298	(10,314)	100.3%	(1.0)%	23	16	2,714,868
Valliant	UAL	91,624	242,557	367,528	51,897	344,266	252,643	26.6%	104.2%	6	2	273,022

Oklahoma Municipal Retirement Fund
COMPARISON OF PLAN ASSETS AND OBLIGATIONS as of 7/1/2023

City	Cost Method	Valuation Assets	Valuation Payroll	PVB Actives	PVB Nonactives	AAL	UAAL (Surplus)	Funded Ratio	UAAL as % of Val Pay	Actives	Nonactives	ABO
Velma	Surplus	391,966	158,615	184,472	227,496	323,818	(68,148)	121.0%	(43.0)%	6	7	274,273
Vian	UAL	639,123	604,337	1,041,115	119,088	674,558	35,435	94.7%	5.9%	14	4	445,308
Vinita	UAL	9,445,754	1,556,254	4,632,714	6,980,491	10,170,785	725,031	92.9%	46.6%	40	39	8,961,107
Wakita	Surplus	242,232	44,221	58,869	145,389	179,308	(62,924)	135.1%	(142.3)%	1	1	161,776
Warr Acres	UAL	10,278,451	1,885,232	7,014,836	5,358,909	11,394,671	1,116,220	90.2%	59.2%	37	33	9,658,467
Watonga	UAL	5,371,513	1,482,891	3,566,877	3,400,287	5,950,856	579,343	90.3%	39.1%	36	31	5,157,451
Waukomis	Surplus	629,208	338,864	540,625	268,174	530,258	(98,950)	118.7%	(29.2)%	7	2	397,284
Waurika	Surplus	1,320,587	446,885	894,804	819,600	1,273,622	(46,964)	103.7%	(10.5)%	12	7	1,006,418
Weatherford	UAL	8,285,708	3,751,572	7,708,558	4,189,655	9,373,809	1,088,101	88.4%	29.0%	80	46	7,566,872
Webbers Falls	Surplus	265,573	342,352	264,105	150,547	254,546	(11,027)	104.3%	(3.2)%	10	9	193,706
Wellston	Surplus	694,501	240,677	299,640	388,536	524,831	(169,670)	132.3%	(70.5)%	6	8	440,606
Westville Utility Authority	Surplus	875,741	399,000	1,001,934	198,467	813,022	(62,718)	107.7%	(15.7)%	10	4	473,378
Wetumka	UAL	1,706,202	521,116	719,588	1,513,329	1,873,444	167,242	91.1%	32.1%	18	13	1,764,724
Wilburton	UAL	383,172	1,076,234	944,322	141,520	778,586	395,414	49.2%	36.7%	27	6	460,186
Yale	Surplus	1,797,131	579,541	1,413,878	917,652	1,757,458	(39,672)	102.3%	(6.8)%	15	12	1,397,144
Yukon	UAL	33,255,316	3,894,428	19,081,142	20,595,138	37,222,034	3,966,718	89.3%	101.9%	49	133	31,728,530
Total		709,613,719	180,507,271	466,275,118	409,611,656	747,634,279	38,020,560	94.9%	21.1%	3,847	2,916	625,248,917

Totals exclude frozen plans and plans with only nonactive participants.

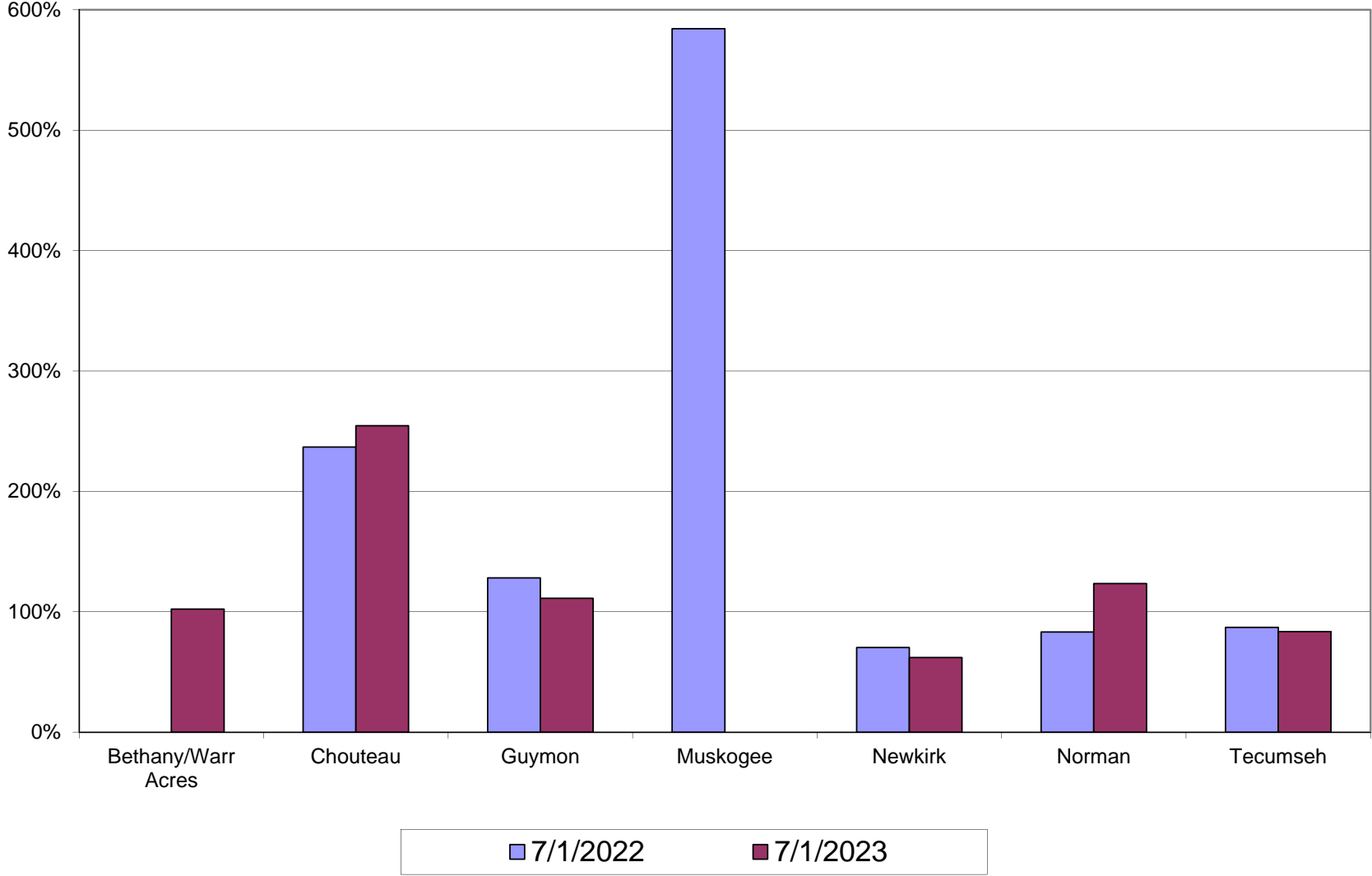
C Funded Status of Plans with No Further Benefit Accruals

There are 7 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 *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 2023.
- The *present value of benefits*. This is the total of all future benefits expected to be paid to plan participants as of July 1, 2023, discounted to the valuation date at the assumed rate of return (7.25%). The present value of benefits is shown separately for active employees with frozen benefits and for nonactive participants.
- 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 ratio*. This is the market value of assets as a percent of the plan obligations.
- The plan *recommended contribution*. If plan obligations exceed assets, the annual payment required to amortize the deficiency over a specified number of years is reported.
- The number of *participants* due benefits from the Trust, shown separately for active and nonactive participants. See Section F for more details on the participants included in the valuation.

Oklahoma Municipal Retirement Fund

Funded Status of Nonactive Plans



Oklahoma Municipal Retirement Fund

FUNDED STATUS OF PLANS WITH NO FURTHER BENEFIT ACCRUALS

City	Market Value of Assets	Present Value of Benefits			Deficiency/ (Surplus)	Funded Ratio		Recommended Contribution	Participants	
		Actives	Nonactives	Total		7/1/2022	7/1/2023		Actives	Nonactives
Bethany/Warr Acres	2,900,020	0	2,837,195	2,837,195	(62,824)	102.2%	0	0	13	
Chouteau	11,605	0	4,561	4,561	(7,045)	236.9%	254.5%	0	0	1
Guymon	6,159,809	916,273	4,622,328	5,538,601	(621,207)	128.1%	111.2%	0	17	74
Muskogee	39,605	0	0	0	(39,605)	584.3%		0	0	0
Newkirk	1,162,438	353,773	1,522,086	1,875,859	713,421	70.3%	62.0%	51,799	4	11
Norman	163,919	0	132,785	132,785	(31,134)	83.2%	123.4%	0	0	4
Tecumseh	121,290	0	145,200	145,200	23,910	87.1%	83.5%	3,444	0	6
Total	10,558,686	1,270,047	9,264,155	10,534,201	(24,484)	112.9%	100.2%	55,243	21	109

D Development of the Actuarial Value of Assets

This section shows the development of the actuarial value of assets as of July 1, 2023.

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.

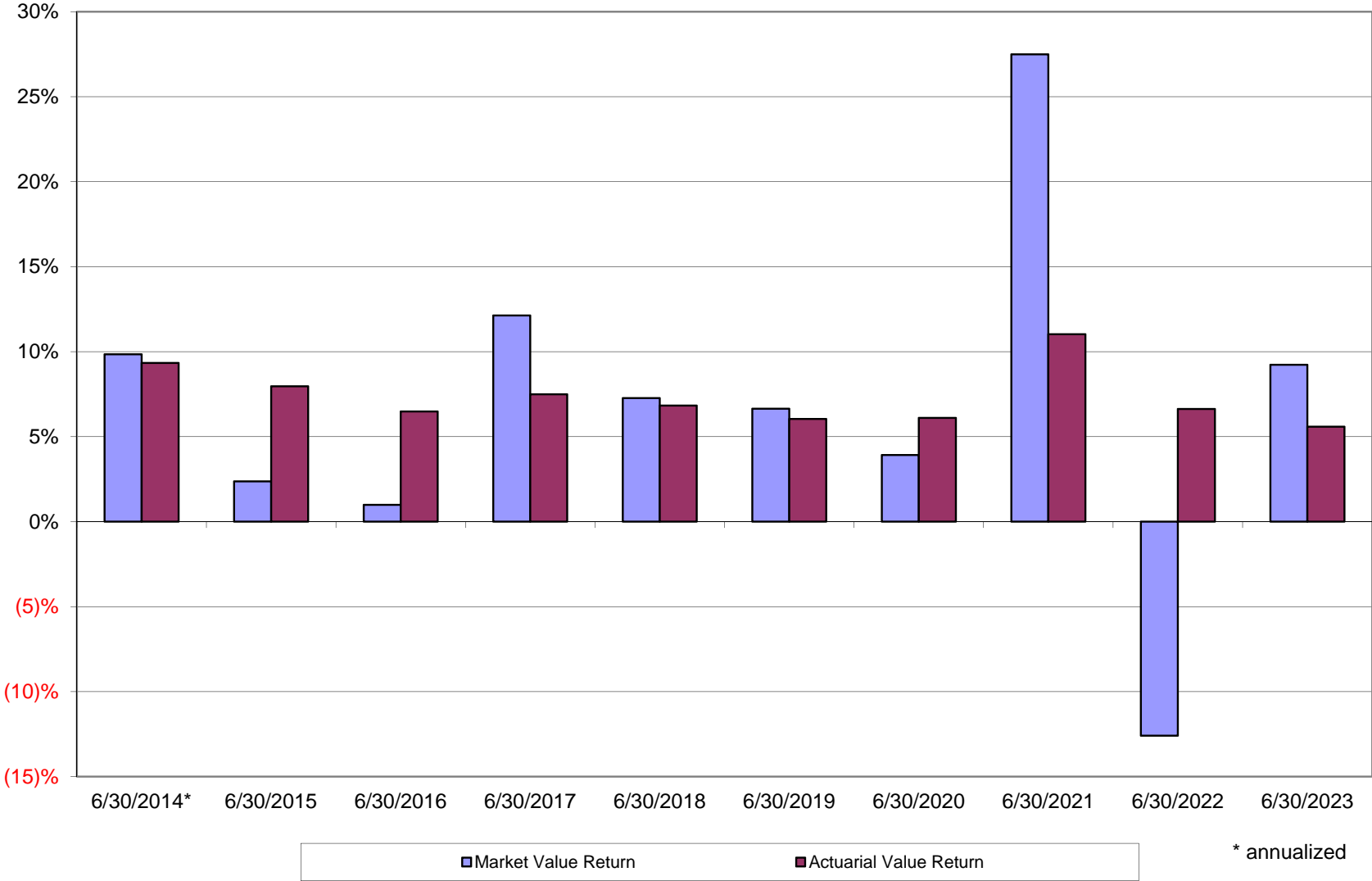
The actuarial value of assets is equal to the market value of assets, plus any unrecognized investment losses (or minus any unrecognized investment gains), subject to a 30% corridor. If the actuarial asset value would otherwise be outside this 30% corridor, it is instead equal to the relevant corridor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

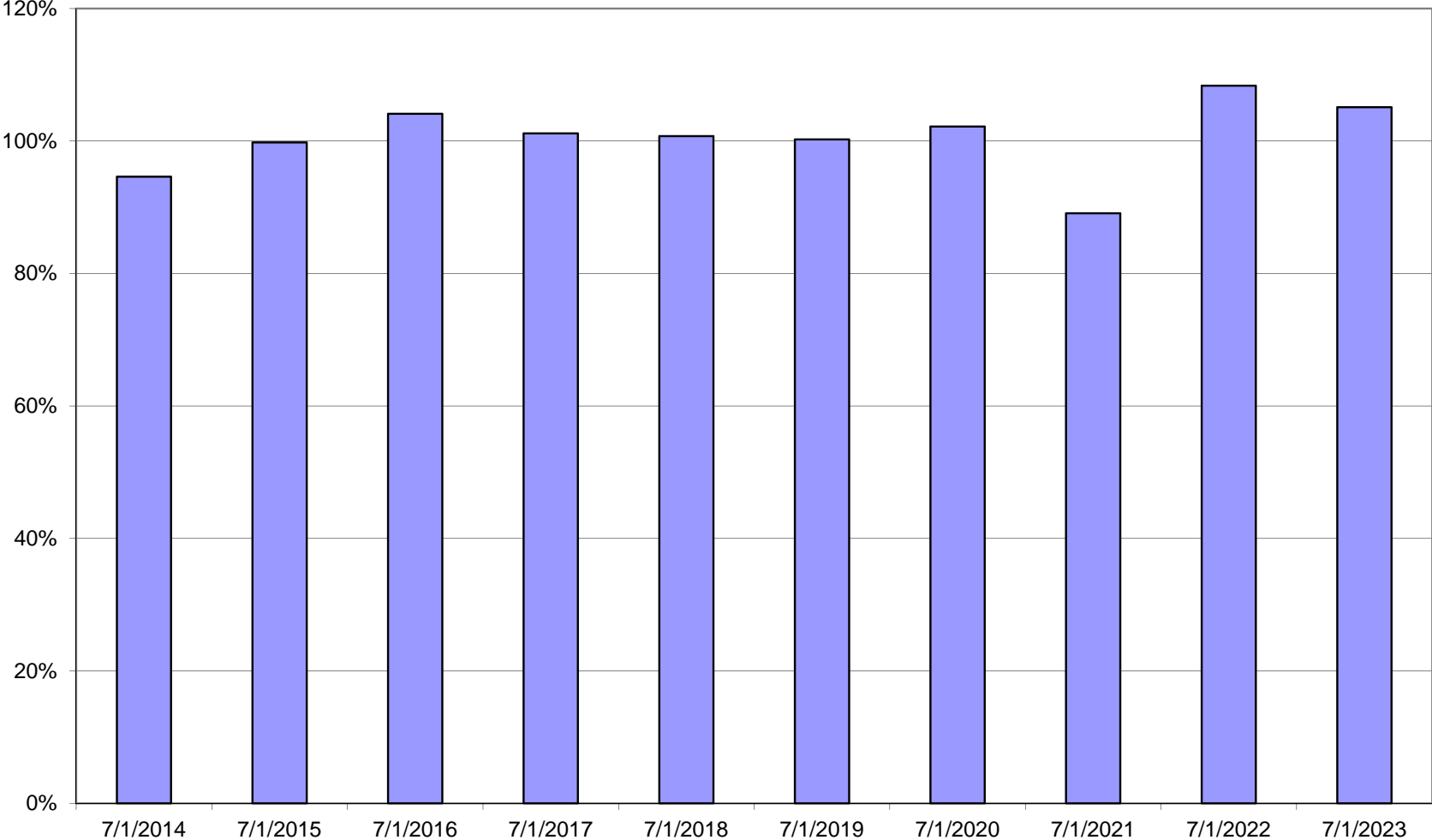
Oklahoma Municipal Retirement Fund

Historical Return on Plan Assets



Oklahoma Municipal Retirement Fund

Actuarial Value of Assets as Percent of Market Value



DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2021	Actuarial Value of Assets as of 7/1/2021	Market Value of Assets as of 7/1/2022	Actuarial Value of Assets as of 7/1/2022	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2023	Investment (Gain)/Loss	Cumulative Unrec Invmnt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2023
					Employer	Employee	Distributions						
Adair	389,378	345,964	320,208	348,701	20,888	12,533	(25,409)	23,506	351,726	358,083	(6,358)	18,240	376,324
Altus	25,719,319	22,841,653	21,941,960	23,761,977	1,017,192	296,600	(2,069,976)	1,563,380	22,749,157	23,086,596	(337,439)	1,215,750	24,302,346
Alva	5,784,944	5,147,736	5,063,509	5,498,884	87,726	57,978	(147,974)	367,022	5,428,262	5,513,738	(85,476)	286,684	5,800,422
Antlers	1,809,025	1,610,410	1,570,671	1,705,476	67,047	48,642	(101,312)	114,395	1,699,443	1,725,954	(26,512)	88,612	1,814,567
Ardmore	44,788,942	39,819,480	38,902,282	42,217,940	803,244	566,961	(1,571,379)	2,813,123	41,514,231	42,169,338	(655,107)	2,184,651	44,353,990
Bartlesville	26,952,344	23,978,804	23,408,456	25,405,422	889,539	273,308	(1,529,134)	1,683,835	24,726,005	25,115,047	(389,042)	1,316,797	26,431,844
Bethany *	34,092,190	30,306,759	28,500,758	30,857,797	308,795	220,823	(1,991,046)	2,013,328	29,052,658	29,507,972	(455,314)	1,562,489	31,070,461
Billings	293,140	262,168	256,680	279,555	1,799	3,095	(3,204)	18,671	277,040	281,396	(4,356)	14,681	296,077
Binger	277,957	247,407	236,813	256,642	6,374	5,061	(20,464)	16,842	244,626	248,377	(3,751)	13,122	261,499
Blackwell	6,782,094	6,048,686	5,911,895	6,423,158	205,457	106,393	(328,371)	428,013	6,323,387	6,421,058	(97,671)	333,206	6,754,263
Blair	756,852	674,097	677,743	737,171	17,951	5,251	(10,401)	49,600	740,146	751,995	(11,849)	38,858	790,852
Boise City	2,017,789	1,794,330	1,697,158	1,838,522	57,041	0	(130,664)	120,375	1,743,910	1,770,937	(27,027)	93,704	1,864,641
Bokchito	219,708	196,252	205,605	224,463	23,431	10,042	(15,778)	15,548	238,848	242,877	(4,029)	11,820	254,697
Braman	185,294	164,170	137,472	147,295	15,925	0	(41,284)	9,047	121,160	122,797	(1,637)	6,856	129,653
Bristow	4,642,846	4,128,282	3,948,612	4,280,761	104,247	55,653	(236,813)	283,486	4,155,185	4,221,303	(66,117)	217,916	4,439,219
Broken Bow	8,419,241	7,490,174	7,485,524	8,134,082	339,465	177,112	(328,514)	549,518	8,223,106	8,352,841	(129,736)	425,109	8,777,951
Buffalo	1,253,130	1,114,633	1,056,588	1,144,655	21,414	9,118	(73,383)	75,049	1,088,785	1,105,494	(16,709)	58,342	1,163,835
Burns Flat	1,031,446	918,232	898,006	975,085	25,501	13,010	(57,158)	64,429	943,788	958,401	(14,613)	51,046	1,009,447
Calera	1,533,120	1,362,595	1,354,956	1,471,487	69,974	30,017	(106,769)	97,989	1,446,166	1,470,371	(24,205)	75,830	1,546,200
Central Okla MCD	2,498,889	2,221,701	2,171,421	2,356,097	18,683	29,894	(39,513)	157,757	2,338,242	2,375,021	(36,779)	121,135	2,496,156
Chandler	4,321,925	3,848,965	3,722,850	4,041,801	100,155	58,948	(119,021)	271,360	4,034,291	4,097,384	(63,092)	210,028	4,307,412
Checotah	3,380,168	3,007,643	2,986,666	3,244,748	133,736	62,925	(167,031)	217,607	3,233,903	3,284,411	(50,508)	170,025	3,454,436
Cherokee & CDA	538,106	478,287	481,199	522,239	34,142	15,590	(35,479)	35,404	530,855	538,903	(8,049)	27,026	565,930
Chickasha	21,075,377	18,723,080	17,658,087	19,113,954	203,785	112,507	(1,216,314)	1,247,586	18,005,651	18,280,175	(274,524)	970,384	19,250,559
Claremore	23,149,381	20,607,059	20,155,254	21,880,697	805,179	345,825	(1,219,880)	1,458,759	21,545,137	21,880,329	(335,191)	1,127,020	23,007,349
Cleo Springs	227,886	201,836	166,623	178,425	1,373	512	(55,354)	10,142	123,296	125,262	(1,967)	8,308	133,570

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2021	Actuarial Value of Assets as of 7/1/2021	Market Value of Assets as of 7/1/2022	Actuarial Value of Assets as of 7/1/2022	Contributions		Distributions	Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2023	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2023
					Employer	Employee							
Cleveland	3,401,706	3,021,145	2,821,486	3,049,781	167,404	42,983	(316,428)	200,714	2,916,158	2,959,494	(43,337)	152,462	3,111,956
Clinton	17,290,442	15,375,975	14,848,892	16,102,752	176,158	110,670	(781,765)	1,058,603	15,412,559	15,651,692	(239,134)	829,714	16,481,407
Collinsville	4,622,773	4,117,300	3,973,423	4,320,770	193,687	98,248	(172,020)	292,420	4,385,758	4,453,948	(68,189)	228,442	4,682,390
Copan	110,430	98,856	99,689	108,676	10,437	3,615	(10,375)	7,361	110,726	112,424	(1,698)	5,926	118,349
Cordell	6,469,873	5,753,222	5,475,025	5,932,926	45,816	0	(306,681)	387,483	5,601,643	5,688,376	(86,733)	304,176	5,992,552
Cushing	25,738,340	22,879,813	21,570,217	23,349,796	503,729	0	(1,504,305)	1,527,570	22,097,211	22,429,067	(331,857)	1,186,572	23,615,640
Davis	2,942,552	2,616,734	2,549,098	2,765,058	106,590	63,112	(161,448)	185,109	2,742,461	2,784,997	(42,536)	142,107	2,927,104
Del City *	23,012,735	20,462,616	19,999,485	21,686,677	910,682	405,033	(1,423,827)	1,446,044	21,337,416	21,676,825	(339,408)	1,102,327	22,779,151
Dewey	2,691,823	2,394,826	2,356,887	2,560,036	73,986	24,600	(69,989)	171,911	2,557,394	2,598,120	(40,726)	133,175	2,731,295
Drumright	3,122,812	2,778,192	2,630,694	2,851,011	80,535	37,314	(217,182)	187,124	2,718,485	2,761,063	(42,577)	145,304	2,906,367
Durant	30,914,330	27,486,978	26,500,840	28,734,377	505,886	332,328	(1,394,298)	1,901,153	27,845,908	28,279,362	(433,454)	1,475,983	29,755,345
El Reno	7,786,942	6,931,969	6,840,775	7,437,374	253,795	131,519	(428,070)	494,406	7,292,426	7,406,058	(113,632)	394,117	7,800,175
Eufaula	1,713,947	1,524,516	1,464,407	1,588,088	39,966	29,806	(86,956)	105,547	1,552,770	1,576,245	(23,475)	81,987	1,658,232
Fort Cobb	304,341	270,396	256,139	277,247	9,833	5,144	(26,531)	18,151	262,737	266,706	(3,969)	14,038	280,744
Foss Reservoir Public Woi	1,181,139	1,051,203	1,022,959	1,110,511	20,920	10,896	(42,294)	73,785	1,086,265	1,103,290	(17,025)	57,489	1,160,779
Frederick	5,690,205	5,054,662	4,862,970	5,268,611	165,807	55,226	(267,823)	350,869	5,167,049	5,247,675	(80,626)	267,709	5,515,385
Garber	169,395	151,653	166,873	182,758	15,438	7,412	(5,035)	12,744	197,432	200,608	(3,176)	10,235	210,843
Geary	2,148,822	1,912,882	1,885,981	2,048,482	53,236	22,803	(103,438)	135,740	1,994,322	2,025,343	(31,021)	107,625	2,132,969
Goodwell	391,389	348,419	321,519	349,918	8,592	4,730	(31,956)	22,635	325,520	330,206	(4,686)	19,353	349,559
Gore and Gore PWA	1,175,269	1,045,169	1,043,235	1,133,055	29,783	28,846	(52,662)	75,851	1,125,053	1,142,014	(16,961)	59,852	1,201,865
Granite	2,122,878	1,890,445	1,844,517	2,002,033	50,519	14,033	(112,133)	132,003	1,928,939	1,958,006	(29,066)	104,716	2,062,722
Guthrie	8,533,925	7,587,721	7,389,338	8,018,246	199,158	98,116	(517,501)	527,744	7,696,855	7,813,458	(116,603)	419,834	8,233,292
Harrah	3,899,612	3,471,060	3,394,407	3,689,027	186,984	49,084	(223,262)	246,559	3,653,771	3,711,189	(57,418)	194,362	3,905,551
Healdton	2,079,453	1,849,873	1,787,046	1,938,674	63,744	38,751	(87,305)	130,111	1,932,348	1,962,339	(29,991)	99,753	2,062,092
Henryetta	4,866,368	4,335,858	4,287,185	4,662,776	253,687	102,450	(676,371)	299,212	4,266,163	4,293,517	(27,354)	283,501	4,577,018
Hooker	1,612,255	1,434,347	1,353,746	1,468,939	62,361	17,111	(155,162)	95,403	1,373,458	1,394,040	(20,582)	77,719	1,471,759

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2021	Actuarial Value of Assets as of 7/1/2021	Market Value of Assets as of 7/1/2022	Actuarial Value of Assets as of 7/1/2022	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2023	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2023
					Employer	Employee	Distributions						
Hulbert	1,066,957	949,329	957,329	1,040,021	67,003	20,817	(57,973)	70,488	1,057,664	1,073,460	(15,796)	54,860	1,128,320
Hydro	459,868	408,693	396,504	429,650	20,719	9,066	(51,842)	27,947	402,395	407,990	(5,596)	22,496	430,486
Kansas	176,137	156,919	157,923	171,579	8,801	5,211	(10,211)	11,587	173,311	175,969	(2,658)	8,956	184,925
Kiefer	213,536	190,320	205,915	224,754	18,133	9,144	(4,596)	15,751	244,347	248,213	(3,865)	12,224	260,437
Kingston	908,741	809,287	768,537	833,754	23,875	23,597	(67,791)	54,982	803,201	814,584	(11,383)	44,053	858,637
Krebs & Krebs Utility Auth.	713,272	635,844	653,277	712,082	38,503	26,938	(11,637)	49,313	756,393	768,535	(12,141)	37,901	806,435
Laverne	1,771,591	1,576,694	1,515,802	1,644,723	60,493	20,345	(84,882)	109,749	1,621,508	1,646,686	(25,179)	85,072	1,731,758
Lindsay	6,331,280	5,631,145	5,454,838	5,920,058	79,591	64,315	(280,328)	390,530	5,708,946	5,798,315	(89,369)	307,738	6,106,053
Madill	4,253,876	3,789,212	3,775,837	4,107,158	141,469	67,519	(152,747)	275,787	4,107,865	4,174,655	(66,790)	215,715	4,390,369
Mannford	4,220,473	3,762,072	3,817,500	4,154,567	301,409	108,877	(301,743)	280,703	4,206,746	4,274,273	(67,527)	218,533	4,492,806
Marietta	1,592,310	1,417,457	1,379,988	1,498,089	62,581	43,865	(90,347)	100,633	1,496,719	1,520,457	(23,738)	77,073	1,597,530
Marietta PWA	639,962	570,911	570,076	620,326	64,495	14,383	(66,598)	41,776	624,132	633,166	(9,034)	33,440	666,606
McLoud	1,123,985	1,001,795	1,029,793	1,121,984	62,276	40,033	(55,987)	76,339	1,152,454	1,170,919	(18,465)	59,983	1,230,902
Medford *	4,522,904	4,021,706	3,746,389	4,063,600	116,299	17,131	(227,523)	268,202	3,920,498	3,981,140	(60,642)	211,647	4,192,787
Meeker	918,979	817,287	797,837	865,733	42,573	14,918	(44,185)	58,326	869,469	883,179	(13,710)	44,265	927,444
Miami	14,689,248	13,069,371	12,718,692	13,804,730	795,247	247,681	(1,023,383)	922,814	13,661,051	13,873,999	(212,948)	713,848	14,587,846
Mooreland	1,737,134	1,543,164	1,467,517	1,588,741	54,077	21,502	(160,810)	103,305	1,485,591	1,506,353	(20,762)	82,412	1,588,765
Mountain Park MCD	1,289,029	1,148,663	1,102,308	1,196,495	83,774	16,277	(132,294)	78,748	1,148,813	1,166,959	(18,146)	62,034	1,228,993
Muldrow	2,912,921	2,593,894	2,522,174	2,739,366	122,185	48,786	(223,872)	180,940	2,650,214	2,690,033	(39,819)	144,620	2,834,653
Mustang	9,997,095	8,901,169	8,769,068	9,530,915	374,781	157,661	(528,389)	635,904	9,409,026	9,558,219	(149,192)	500,810	10,059,028
Nichols Hills *	13,875,218	12,340,569	11,553,913	12,538,218	243,651	335,021	(525,176)	839,598	12,447,007	12,639,436	(192,429)	650,436	13,289,872
Noble	3,275,664	2,918,292	2,967,458	3,231,773	159,980	61,524	(132,568)	218,365	3,274,760	3,328,053	(53,293)	171,979	3,500,032
Nowata	3,124,803	2,780,968	2,749,885	2,987,171	74,056	63,907	(115,089)	200,196	2,972,955	3,019,187	(46,232)	156,100	3,175,286
Oilton	567,897	505,147	493,529	535,641	7,554	11,436	(24,705)	35,574	523,387	531,190	(7,803)	28,149	559,339
Okeene	1,480,595	1,315,325	1,255,469	1,359,735	22,802	12,207	(78,428)	89,448	1,301,498	1,321,746	(20,248)	69,091	1,390,837
Okemah	2,339,170	2,083,135	2,131,393	2,319,549	101,811	44,240	(126,388)	155,239	2,306,294	2,342,824	(36,530)	123,853	2,466,677

Oklahoma Municipal Retirement Fund

Exhibit D

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2021	Actuarial Value of Assets as of 7/1/2021	Market Value of Assets as of 7/1/2022	Actuarial Value of Assets as of 7/1/2022	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2023	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2023
					Employer	Employee	Distributions						
Oklahoma Municipal Leagu	9,222,586	8,198,274	7,834,694	8,489,959	175,008	0	(491,126)	556,556	8,075,132	8,196,813	(121,681)	438,007	8,634,820
OkMRF Staff	2,238,854	1,998,311	2,070,732	2,260,397	142,543	35,638	(32,509)	155,409	2,371,811	2,409,361	(37,549)	123,576	2,532,936
Okmulgee	22,149,038	19,694,834	19,029,013	20,637,238	336,550	0	(845,750)	1,361,145	19,880,957	20,193,320	(312,363)	1,061,628	21,254,948
Owasso	25,994,873	23,129,078	23,153,546	25,171,753	873,134	419,813	(939,060)	1,691,461	25,198,894	25,606,661	(407,768)	1,318,064	26,924,725
Pawnee	3,997,646	3,558,958	3,449,830	3,742,775	63,506	65,013	(162,818)	248,869	3,664,401	3,721,226	(56,826)	193,297	3,914,524
Perkins	1,658,854	1,476,093	1,452,890	1,578,103	24,038	24,925	(52,498)	105,206	1,554,561	1,578,988	(24,427)	82,534	1,661,523
Perry	5,713,338	5,070,879	5,061,766	5,489,207	134,327	93,897	(243,558)	366,422	5,412,854	5,497,012	(84,158)	281,730	5,778,741
Piedmont	837,541	747,013	786,649	858,462	63,110	37,865	(20,812)	59,938	926,749	941,728	(14,979)	46,448	988,176
Pond Creek	1,868,057	1,659,854	1,617,692	1,753,886	100,367	24,088	(125,132)	117,258	1,734,274	1,761,229	(26,955)	90,510	1,851,739
Porum	606,388	540,221	552,037	600,682	35,111	11,286	(14,078)	41,194	625,551	635,303	(9,752)	31,785	667,088
Poteau	8,764,157	7,788,728	7,362,871	7,970,076	184,354	77,960	(517,735)	524,549	7,631,999	7,748,870	(116,870)	402,787	8,151,657
Ratliff City	216,866	193,229	196,010	213,400	13,840	6,154	(9,186)	14,603	221,420	224,937	(3,517)	11,307	236,244
Ringling	249,610	222,468	215,964	234,274	15,468	5,321	(12,962)	15,941	239,733	243,362	(3,629)	12,011	255,373
Roland	1,997,390	1,785,161	1,850,158	2,012,924	145,762	80,869	(50,195)	140,532	2,167,127	2,197,346	(30,219)	107,512	2,304,858
Sallisaw	21,604,198	19,222,498	18,819,214	20,434,213	624,695	385,955	(1,161,075)	1,358,940	20,027,728	20,345,267	(317,539)	1,061,607	21,406,874
Seiling	1,321,425	1,175,591	1,155,776	1,255,527	11,116	13,549	(33,311)	83,480	1,230,610	1,250,001	(19,391)	65,811	1,315,812
Shawnee +	43,613,806	38,763,367	36,027,325	38,971,631	249,606	44,179	(2,791,953)	2,521,422	36,050,579	36,603,535	(552,956)	1,960,945	38,564,480
Skiatook	2,723,598	2,428,828	2,571,398	2,807,606	230,125	118,757	(88,940)	195,849	3,027,189	3,076,276	(49,087)	152,854	3,229,129
Spencer +	1,446,911	1,287,469	1,256,596	1,364,263	24,230	33,832	(53,502)	91,269	1,352,425	1,373,820	(21,395)	70,418	1,444,238
Spiro	1,528,271	1,360,294	1,300,049	1,409,363	58,670	19,557	(102,875)	93,360	1,368,761	1,389,627	(20,866)	72,506	1,462,133
Stilwell	11,506,346	10,229,174	9,704,084	10,509,308	220,466	154,034	(710,902)	691,352	10,059,034	10,211,628	(152,595)	534,394	10,746,023
Stratford	431,733	384,026	368,544	399,993	3,277	6,558	(13,337)	26,593	391,635	397,179	(5,544)	21,247	418,426
Stroud	4,870,616	4,334,706	4,281,474	4,652,591	182,048	79,646	(226,347)	311,688	4,628,508	4,701,234	(72,726)	243,578	4,944,812
Sulphur	6,883,097	6,119,152	5,929,481	6,430,645	228,794	77,856	(382,991)	427,120	6,280,260	6,379,091	(98,831)	330,472	6,709,562
Talihina & TPWA	1,092,623	974,422	998,803	1,088,071	61,480	26,027	(22,361)	74,775	1,138,724	1,156,536	(17,812)	57,855	1,214,391
Thomas	1,224,383	1,089,954	1,058,899	1,148,966	42,942	14,443	(79,181)	75,980	1,113,083	1,130,074	(16,991)	59,494	1,189,568

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2021	Actuarial Value of Assets as of 7/1/2021	Market Value of Assets as of 7/1/2022	Actuarial Value of Assets as of 7/1/2022	Contributions			Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2023	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2023
					Employer	Employee	Distributions						
Tipton	383,071	342,848	320,481	349,069	16,539	8,505	(28,360)	23,115	340,280	345,751	(5,472)	18,888	364,639
Tishomingo	683,794	608,618	631,696	687,937	45,972	30,710	(38,884)	47,168	716,663	728,137	(11,474)	36,345	764,482
Tonkawa	3,513,738	3,125,622	3,014,324	3,270,132	75,480	37,398	(191,438)	215,691	3,151,454	3,200,703	(49,249)	168,909	3,369,611
Valliant	31,236	30,443	55,320	63,593	21,199	7,277	(3,618)	4,912	85,090	86,486	(1,396)	5,137	91,624
Velma	416,065	370,173	352,688	382,247	5,268	5,344	(21,721)	25,167	366,746	372,376	(5,630)	19,590	391,966
Vian	506,755	450,936	486,347	529,645	55,480	35,348	(13,349)	38,069	601,895	612,123	(10,228)	27,000	639,123
Vinita	10,210,185	9,073,070	8,665,696	9,390,896	255,371	86,776	(791,495)	611,974	8,828,322	8,960,132	(131,810)	485,622	9,445,754
Wakita	265,586	236,266	222,142	240,619	995	995	(13,328)	15,694	226,498	229,993	(3,494)	12,239	242,232
Warr Acres	10,890,566	9,682,218	9,242,824	10,014,366	183,301	73,320	(540,403)	659,818	9,618,860	9,767,921	(149,061)	510,530	10,278,451
Watonga	5,603,053	4,983,758	4,773,640	5,175,092	216,414	57,792	(362,507)	342,888	5,028,227	5,105,696	(77,469)	265,818	5,371,513
Waukomis	612,341	546,280	546,634	594,981	17,898	18,018	(33,901)	39,704	588,354	597,305	(8,951)	31,903	629,208
Waurika	1,407,886	1,250,235	1,201,238	1,301,042	22,809	17,215	(91,461)	85,225	1,235,027	1,254,582	(19,554)	66,005	1,320,587
Weatherford	8,114,496	7,217,661	7,136,496	7,751,923	299,133	215,940	(413,547)	521,076	7,759,097	7,881,199	(122,102)	404,509	8,285,708
Webbers Falls	262,442	233,941	229,061	249,002	6,804	7,709	(11,763)	16,707	248,518	252,460	(3,942)	13,113	265,573
Wellston	725,850	647,809	630,143	684,764	19,513	0	(45,721)	44,735	648,670	658,616	(9,946)	35,885	694,501
Westville Utility Authority	827,343	734,841	741,170	804,493	28,887	29,115	(32,107)	54,674	821,739	834,474	(12,735)	41,266	875,741
Wetumka	1,838,051	1,634,174	1,565,695	1,695,099	60,087	29,669	(170,211)	110,596	1,595,837	1,619,166	(23,329)	87,036	1,706,202
Wilburton	276,376	247,449	276,134	302,669	65,231	16,381	(19,408)	22,275	360,612	366,354	(5,742)	16,818	383,172
Yale	1,947,313	1,734,265	1,682,645	1,827,190	45,417	35,667	(207,048)	117,426	1,674,106	1,701,667	(27,560)	95,464	1,797,131
Yukon	35,047,232	31,176,090	30,007,606	32,548,677	700,495	126,334	(1,886,541)	2,137,137	31,085,031	31,567,002	(481,971)	1,688,314	33,255,316
Bartlesville **	656,636	656,636	551,332	551,332	0	0	(32,256)	38,802	557,879	566,329	(8,450)		566,329
Mannford **	68,204	68,204	59,554	59,554	0	0	0	4,318	63,872	64,884	(1,012)		64,884
Weatherford **	129,339	129,339	116,088	116,088	3,684	0	0	8,550	128,322	130,443	(2,121)		130,443
Bethany/Warr Acres *	3,421,343	3,039,879	2,896,394	3,136,781	33,604	17,970	(296,140)	201,123	2,852,951	2,900,020	(47,068)	(329,872)	2,570,148
Chouteau *	13,557	13,557	11,274	11,274	0	0	(639)	794	11,429	11,605	(177)		11,605
Guymon *	7,418,994	7,418,994	6,213,902	6,213,902	0	0	(584,382)	429,324	6,058,844	6,159,809	(100,964)		6,159,809

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

City	Market Value of Assets as of 7/1/2021	Actuarial Value of Assets as of 7/1/2021	Market Value of Assets as of 7/1/2022	Actuarial Value of Assets as of 7/1/2022	Contributions		Distributions	Assumed Yield at Valuation Rate (7.25%)	Expected Market Value	Market Value of Assets as of 7/1/2023	Investment (Gain)/Loss	Cumulative Unrec Invt (Gains)/Losses	Actuarial Value of Assets as of 7/1/2023
					Employer	Employee							
Muskogee *	43,472	43,472	39,089	39,089	0	0	(2,814)	2,732	39,007	39,605	(598)		39,605
Newkirk *	1,392,531	1,392,531	1,132,799	1,132,799	54,000	0	(121,856)	79,668	1,144,611	1,162,438	(17,827)		1,162,438
Norman *	215,349	215,349	143,619	143,619	52,686	0	(44,284)	10,717	162,738	163,919	(1,181)		163,919
Tecumseh *	163,949	163,949	128,008	128,008	0	0	(17,149)	8,659	119,518	121,290	(1,772)		121,290
Total	751,185,854	669,225,794	645,802,312	699,806,238	19,247,767	8,472,736	(40,596,459)	46,353,914	679,280,271	689,814,567	(10,534,297)	35,216,300	725,030,867

* 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 employees of Warr Acres hired before July 1, 2011, 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 hired before July 1, 2020, 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 was initially set as 7/1/2013, or if later, the first amortization date after joining OkMRF. Because of significant differences in implementing the first-ever mortality study specific to public pension plans, the initial amortization base date was reset to 7/1/2020 for all plans. We do not anticipate resetting the amortization base again, except as described in the last paragraph in this exhibit. 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 as the contribution effective date for the first valuation 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 <i>Purpose</i>	<i>Rate</i>	Age	Rates per Thousand					Annual Pay Increase	
			Mortality (M)	Mortality (F)	Turnover	Disability	Retire-N		Retire-E
Basic valuation		20	0.398	0.125	150.00	0.80	0	0	8.00%
Before retirement	7.25%	21	0.400	0.120	145.90	0.85	0	0	8.00%
After retirement	7.25%	22	0.385	0.110	141.80	0.91	0	0	8.00%
		23	0.378	0.105	137.70	0.96	0	0	8.00%
Mortality Tables		24	0.363	0.095	133.70	1.01	0	0	8.00%
<i>Before retirement (employee rates)</i>		25	0.368	0.100	129.60	1.07	0	0	8.00%
PubG-2010 (25% A/75% B) males		26	0.388	0.110	125.60	1.15	0	0	7.70%
PubG-2010 (50% A/50% B) females		27	0.405	0.120	121.60	1.23	0	0	7.40%
with projected mortality improvement		28	0.423	0.135	117.60	1.31	0	0	7.10%
<i>After retirement (annuitant rates)</i>		29	0.450	0.145	113.60	1.39	0	0	6.80%
120% PubG-2010 (25% A/75% B) males		30	0.468	0.160	109.60	1.47	0	0	6.50%
120% PubG-2010 (50% A/50% B) females		31	0.495	0.180	105.70	1.60	0	0	6.60%
with projected mortality improvement		32	0.520	0.190	101.70	1.73	0	0	6.70%
<i>Disabled (disabled retiree rates)</i>		33	0.548	0.215	97.80	1.87	0	0	6.80%
2022 OASDI ultimate rates		34	0.583	0.230	93.90	2.00	0	0	6.90%
		35	0.613	0.255	90.00	2.13	0	0	7.00%
Pay Increase Assumption		36	0.655	0.275	87.30	2.40	0	0	6.90%
Annual rates of pay increase		37	0.693	0.305	84.60	2.67	0	0	6.80%
as shown		38	0.745	0.335	81.90	2.93	0	0	6.70%
		39	0.800	0.365	79.20	3.20	0	0	6.60%
COLA Increase Assumption		40	0.863	0.400	76.50	3.47	0	0	6.50%
For benefits subject to adjustment		41	0.925	0.435	73.80	3.97	0	0	6.32%
based on change in CPI	2.75%	42	1.005	0.470	71.10	4.48	0	0	6.14%
		43	1.088	0.515	68.50	4.99	0	0	5.99%
Turnover		44	1.185	0.565	65.80	5.49	0	0	5.84%
Select and ultimate rates		45	1.285	0.615	63.20	6.00	0	0	5.71%
Ultimate rates are age-related as shown		46	1.403	0.665	60.50	6.00	0	0	5.59%
Additional rates per thousand are		47	1.528	0.720	57.90	6.00	0	0	5.49%
added during the first 5 years:		48	1.663	0.780	55.20	6.00	0	0	5.39%
Year 1:	225	49	1.805	0.845	52.60	6.00	0	0	5.32%
Year 2:	140	50	1.958	0.915	50.00	6.00	0	0	5.25%
Year 3:	100	51	2.120	0.985	53.80	6.80	0	0	5.21%
Year 4:	70	52	2.290	1.060	57.90	7.60	0	0	5.17%
Year 5:	40	53	2.470	1.150	62.30	8.40	0	0	5.13%
		54	2.668	1.240	67.00	9.20	0	0	5.11%
Retirement Age		55	2.875	1.345	72.10	10.00	350	70	5.08%
Normal (N) and early (E) rates		56	3.100	1.455	77.60	11.23	150	70	5.05%
Normal rates apply when employee		57	3.335	1.580	83.50	12.45	150	70	5.04%
is at or above normal retirement age.		58	3.595	1.710	89.80	13.68	150	70	5.03%
Early rates apply when employee		59	3.880	1.865	96.70	14.91	150	70	5.01%
is eligible for early (reduced) retirement.		60	4.185	2.035	104.00	16.13	150	70	5.00%
		61	4.510	2.225	111.90	16.13	150	70	5.00%
Other Assumptions		62	4.870	2.435	120.40	16.13	350	200	5.00%
Percent married	100%	63	5.255	2.675	129.60	16.13	150	200	5.00%
Spouse age difference	3	64	5.670	2.945	139.40	16.13	150	200	5.00%
(female spouses younger)		65	6.128	3.250	150.00	0.00	300		5.00%
		66	6.623	3.585	150.00	0.00	300		5.00%
		67	7.178	3.960	150.00	0.00	300		5.00%
		68	7.780	4.380	150.00	0.00	300		5.00%
		69	8.463	4.850	150.00	0.00	300		5.00%
		70	9.210	5.360	0.00	0.00	1000		5.00%

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

Oklahoma Municipal Retirement Fund

SUMMARY OF ACTUARIAL ASSUMPTIONS

Determination of Low-Default-Risk Obligation Measure

Method Cashflows for each month in the future for all current participants are projected. For active participants, cashflows are determined for current accrued benefits only, assuming no future increases in benefits from either additional service accruals or increases in participant pay. For nonactive participants, cashflows are determined for the benefits in pay status, and for the future commencement of deferred vested benefits. For benefits entitled to cost-of-living increases, an increase is assumed to occur on each July 1 for benefits in pay status, and each July 1 after benefit commencement for the accrued benefits of active participants and for the deferred vested benefits of nonactive participants.

Projected cashflows were then discounted to the valuation date by applying the yield curve compounded annually (1/12 for each month). For example, the 0.5 spot rate was used for all projected cashflows for the months of July through December, 2023; the 1.0 spot rate was similarly used for projected cashflows for the months of January through June, 2024. The 30-year spot rate was used for discounting all projected cashflows beyond the 30-year horizon.

Finally, any outstanding employee contribution balances for non-vested former employees were added to the total.

Yield Curve We used the Financial Times Stock Exchange Group (FTSE) Pension Discount Curve as of 6/30/2023, as published by the Society of Actuaries:

Duration (years)	Annual Spot Rate	Duration (years)	Annual Spot Rate	Duration (years)	Annual Spot Rate
0.5	5.804%	10.5	4.659%	20.5	5.223%
1.0	5.756%	11.0	4.643%	21.0	5.223%
1.5	5.505%	11.5	4.632%	21.5	5.217%
2.0	5.172%	12.0	4.629%	22.0	5.208%
2.5	4.955%	12.5	4.636%	22.5	5.194%
3.0	4.827%	13.0	4.653%	23.0	5.177%
3.5	4.750%	13.5	4.679%	23.5	5.157%
4.0	4.698%	14.0	4.714%	24.0	5.135%
4.5	4.662%	14.5	4.755%	24.5	5.111%
5.0	4.637%	15.0	4.802%	25.0	5.086%
5.5	4.624%	15.5	4.853%	25.5	5.060%
6.0	4.616%	16.0	4.907%	26.0	5.035%
6.5	4.612%	16.5	4.963%	26.5	5.009%
7.0	4.611%	17.0	5.020%	27.0	4.984%
7.5	4.614%	17.5	5.073%	27.5	4.961%
8.0	4.620%	18.0	5.120%	28.0	4.938%
8.5	4.631%	18.5	5.157%	28.5	4.916%
9.0	4.645%	19.0	5.185%	29.0	4.895%
9.5	4.661%	19.5	5.205%	29.5	4.875%
10.0	4.680%	20.0	5.218%	30.0	4.853%

F Summary of Plan Participants

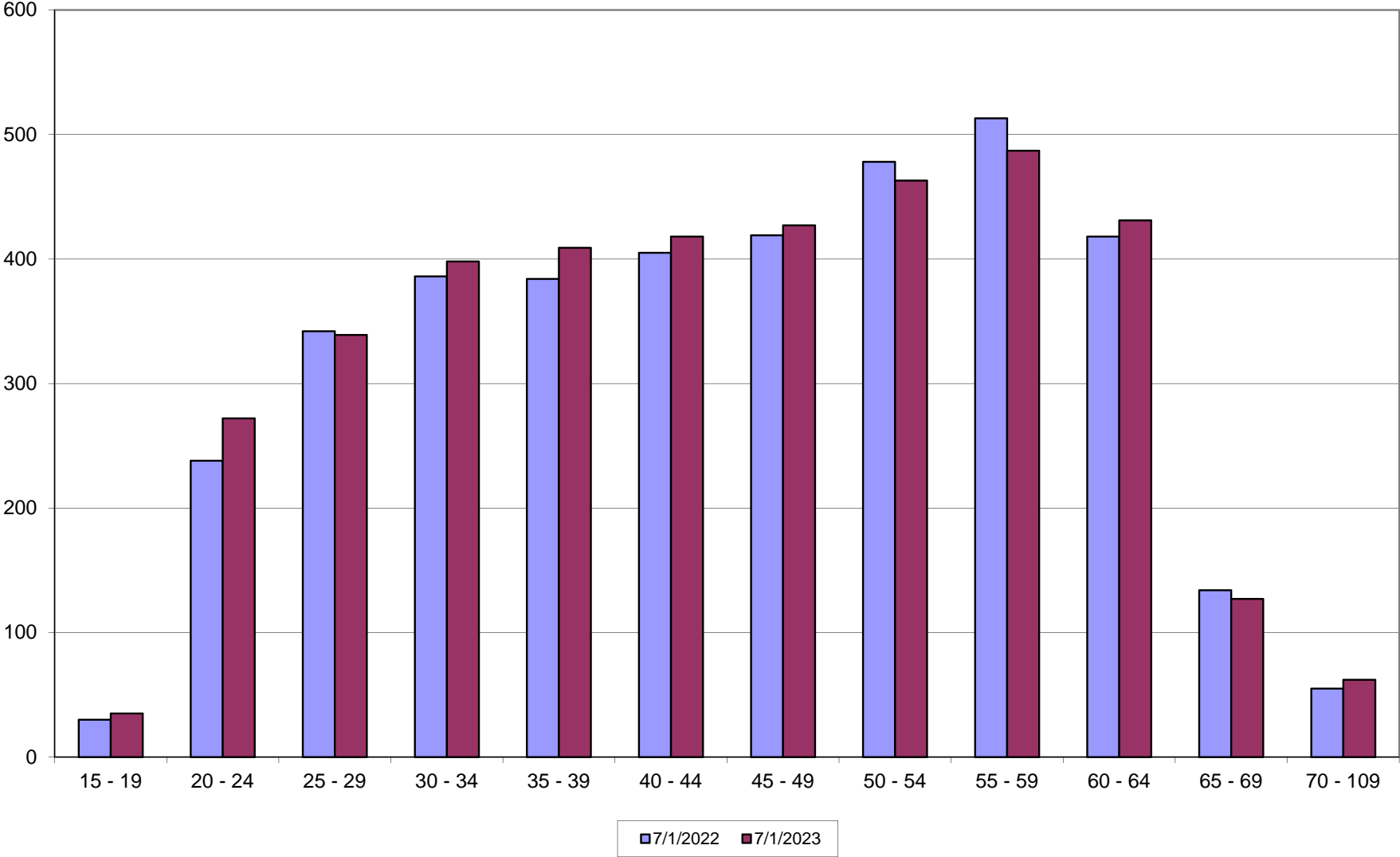
The first three exhibits in this section depict the age and service distribution for active participants as of July 1, 2023 (OkMRF Master Trust in total). The City of Bartlesville is included in the count although it has not adopted the OkMRF master plan. Exhibits F1 and F2 show the July 1, 2022 distributions 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, 2023 (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, 2022 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.

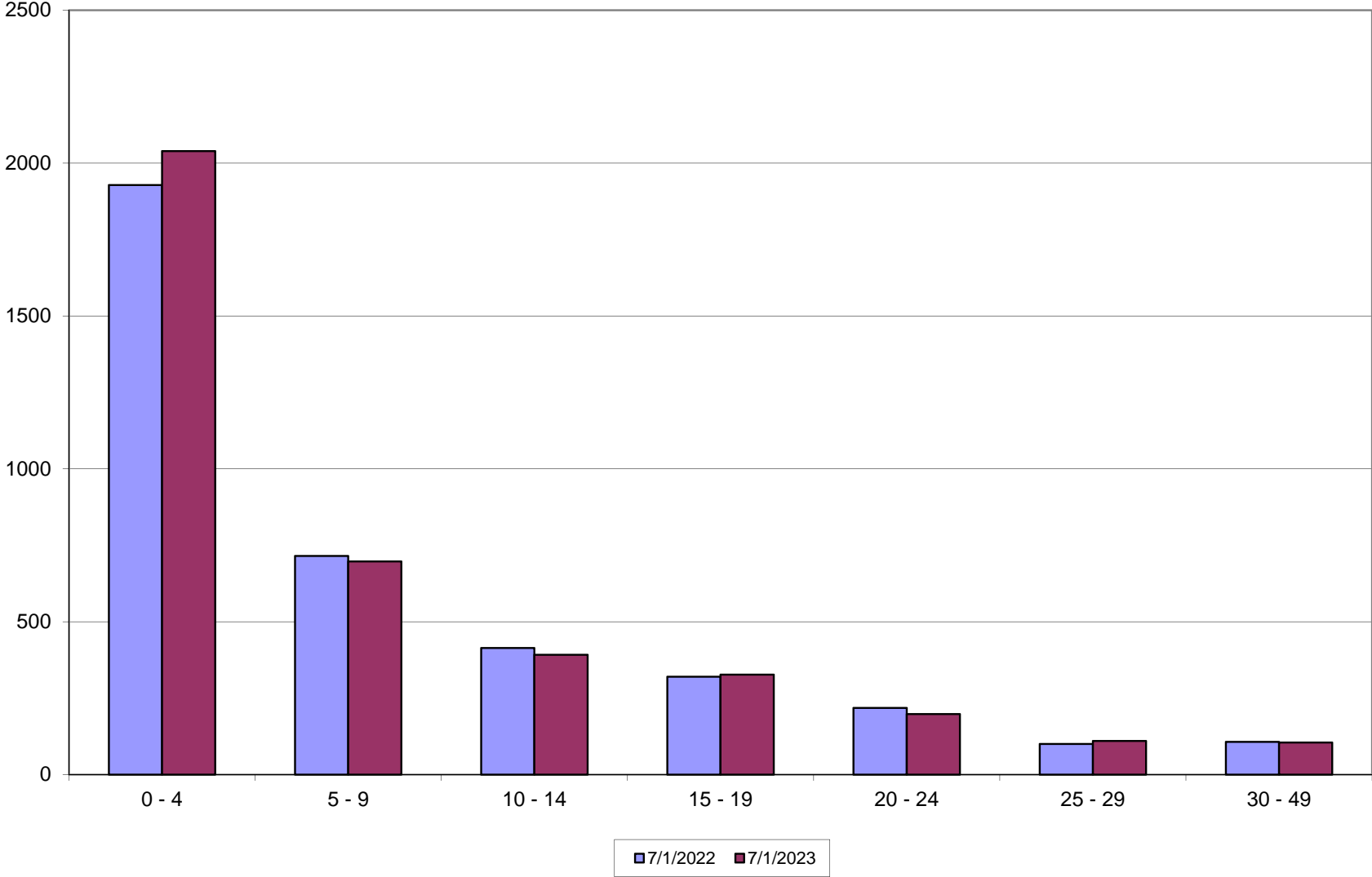
Oklahoma Municipal Retirement Fund

Distribution of Active Employees by Age



Oklahoma Municipal Retirement Fund

Distribution of Active Employees by Service

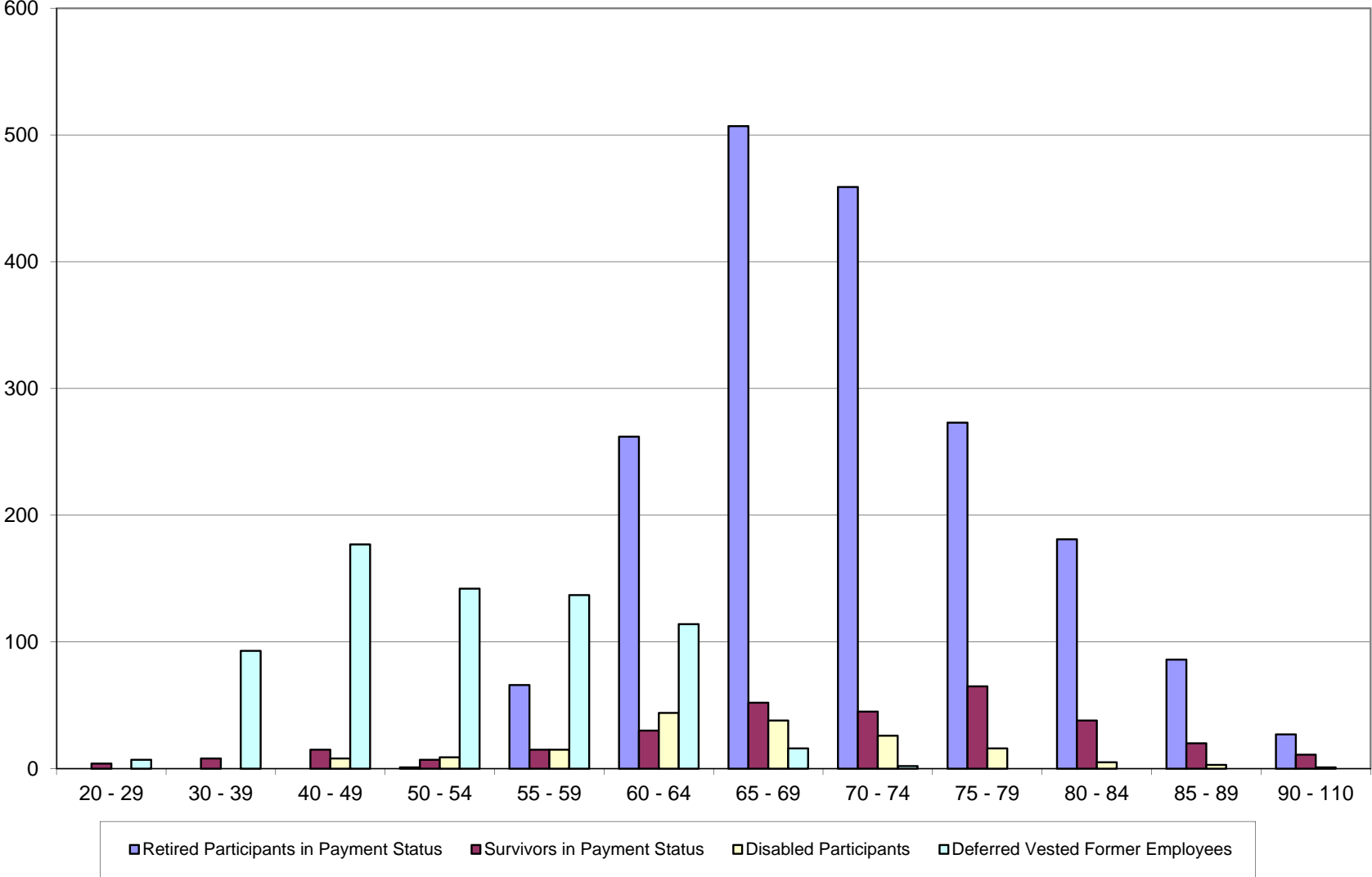


Oklahoma Municipal Retirement Fund
All Cities Combined
AGE AND SERVICE OF ACTIVE PARTICIPANTS
 July 1, 2023

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	35	15,001													35	15,001
20 - 24	270	25,416	2	31,181											272	25,459
25 - 29	284	33,553	54	47,270	1	37,143									339	35,748
30 - 34	287	31,784	80	49,840	30	48,716	1	51,308							398	36,739
35 - 39	239	34,383	96	49,269	49	53,589	23	58,086	2	78,697					409	41,727
40 - 44	223	34,793	90	52,281	53	56,426	40	61,164	12	61,559					418	44,593
45 - 49	194	36,336	81	52,126	58	55,559	43	56,677	32	61,342	18	69,439	1	88,471	427	47,382
50 - 54	176	35,632	76	50,617	65	51,686	57	55,517	48	61,367	24	64,332	17	77,367	463	48,482
55 - 59	162	37,308	94	48,204	50	49,987	71	54,587	46	67,590	31	60,393	33	65,437	487	49,468
60 - 64	115	37,015	77	47,860	51	52,117	72	62,559	45	53,195	28	61,201	43	65,471	431	51,106
65 - 69	33	29,906	34	40,332	24	49,938	9	44,920	10	62,669	8	31,487	9	58,874	127	42,279
70 - 109	21	36,032	13	49,837	11	47,017	11	42,304	3	65,070	1	78,000	2	47,721	62	44,448
All Ages	2,039		697		392		327		198		110		105		3,868	

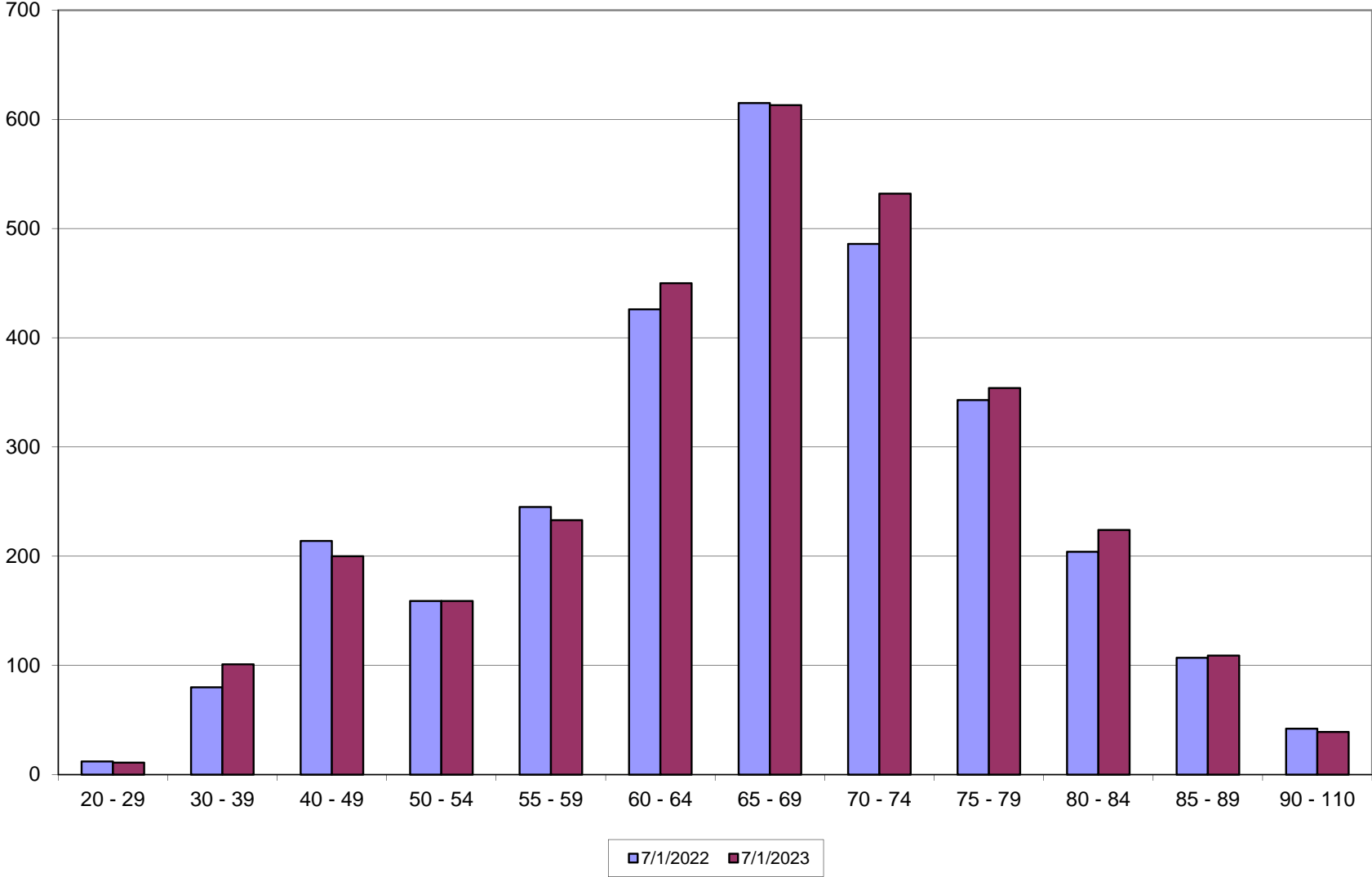
Age is in completed years (age last birthday) on the census date.
 Service is completed years of benefit service on the census date.
 Pay is the total pay for the plan year preceding the census date.

Distribution of Nonactive Participants by Status and Age as of 7/1/2023



Oklahoma Municipal Retirement Fund

Distribution of Nonactive Participants by Age



Oklahoma Municipal Retirement Fund

All Cities Combined

SUMMARY OF NONACTIVE PARTICIPANTS

July 1, 2023

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									
40 - 49									
50 - 54	1	21,588	53.86				1	21,588	53.86
55 - 59	51	1,083,947	57.84	15	311,739	58.27	66	1,395,686	57.93
60 - 64	193	3,900,086	62.68	69	1,488,051	63.10	262	5,388,137	62.80
65 - 69	335	6,816,846	67.59	172	2,973,448	67.51	507	9,790,294	67.56
70 - 74	283	5,076,682	72.36	176	3,029,718	72.45	459	8,106,400	72.39
75 - 79	164	2,461,593	77.29	109	1,709,030	77.26	273	4,170,623	77.28
80 - 84	115	1,565,363	82.19	66	918,655	82.13	181	2,484,018	82.17
85 - 89	45	515,075	87.52	41	447,003	87.35	86	962,077	87.44
90 - 110	17	181,427	92.52	10	69,595	93.02	27	251,023	92.66
Totals	1204	21,622,607	70.17	658	10,947,239	71.73	1862	32,569,845.60	70.69
Ave amount		17,958.98			16,637.14			17,491.86	
Survivors in Payment Status									
0 - 29	2	6,290	25.67	2	15,008	29.44	4	21,298	28.33
30 - 39	4	34,326	36.42	4	53,519	36.51	8	87,846	36.47
40 - 49	4	50,717	47.15	11	87,294	46.14	15	138,012	46.51
50 - 54	4	49,700	51.56	3	34,982	54.16	7	84,682	52.63
55 - 59	5	92,275	56.26	10	104,314	57.57	15	196,589	56.96
60 - 64	2	10,581	63.53	28	437,121	62.43	30	447,702	62.46
65 - 69	12	168,808	67.05	40	433,537	67.50	52	602,345	67.37
70 - 74	5	22,865	72.34	40	452,098	71.96	45	474,963	71.98
75 - 79	8	144,465	77.26	57	506,110	77.31	65	650,575	77.30
80 - 84	3	9,641	82.08	35	282,594	82.48	38	292,235	82.47
85 - 89	2	15,060	86.68	18	135,725	87.69	20	150,784	87.59
90 - 110				11	77,334	94.92	11	77,334	94.92
Totals	51	604,727	63.60	259	2,619,636	70.65	310	3,224,363.76	69.33
Ave amount		11,857.40			10,114.43			10,401.17	
Disabled Participants									
20 - 29									
30 - 39									
40 - 49	8	147,778	48.22				8	147,778	48.22
50 - 54	9	115,635	53.43				9	115,635	53.43
55 - 59	12	183,243	57.79	3	60,550	58.53	15	243,793	57.98
60 - 64	32	648,456	62.04	12	212,532	62.05	44	860,988	62.04
65 - 69	26	495,770	67.38	12	142,552	66.77	38	638,322	67.24
70 - 74	21	210,423	72.77	5	51,519	73.41	26	261,941	72.90
75 - 79	12	139,601	76.53	4	55,370	76.86	16	194,971	76.62
80 - 84	4	31,974	81.92	1	20,510	82.03	5	52,484	81.96
85 - 89	1	12,310	85.17	2	19,421	88.09	3	31,731	86.96
90 - 110	1	4,899	91.06				1	4,899	91.06
Totals	126	1,990,088	64.14	39	562,454	66.99	165	2,552,541.84	64.77
Ave amount		15,794.35			14,421.89			15,469.95	
Deferred Vested Former Employees									
20 - 29	4	14,845	27.53	3	4,490	29.36	7	19,335	27.96
30 - 39	59	400,303	36.50	34	277,960	37.07	93	678,263	36.74
40 - 49	111	1,272,446	45.99	66	627,459	45.51	177	1,899,905	45.83
50 - 54	87	938,816	52.79	55	636,283	52.48	142	1,575,099	52.67
55 - 59	94	945,180	57.40	43	459,797	57.47	137	1,404,977	57.42
60 - 64	72	545,387	62.22	42	417,281	62.30	114	962,668	62.25
65 - 69	13	156,258	66.38	3	15,620	67.76	16	171,878	66.50
70 - 74				2	2,416	70.55	2	2,416	70.55
75 - 79									
Totals	440	4,273,234	51.87	248	2,441,307	51.63	688	6,714,541.36	51.78
Ave amount		9,711.90			9,843.98			9,759.51	
Grand Totals	1821	28,490,657	66.86	1204	16,570,636	68.44	3025	45,061,293	67.44
Ave amount		15,645.61			13,762.99			14,896.30	