



**Cavanaugh Macdonald**  
CONSULTING, LLC  
*The experience and dedication you deserve*

# **GASB STATEMENT NO. 68 REPORT**

**FOR THE OKLAHOMA LAW ENFORCEMENT  
RETIREMENT SYSTEM**

**PREPARED AS OF JUNE 30, 2022**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

October 13, 2022

Board of Trustees  
Oklahoma Law Enforcement Retirement Systems  
421 NW 13<sup>th</sup> Street, Suite 100  
Oklahoma City, OK 73103

Dear Members of the Board:

Presented in this report is information to assist the Oklahoma Law Enforcement Retirement System in providing information required under the Governmental Accounting Standards Board (GASB) Statement No. 68 to participating employers. GASB Statement No. 68 establishes accounting and financial reporting requirements for governmental employers who provide pension benefits to their employees through a trust. This report has been prepared as of June 30, 2022. The calculations in this report have been made on a basis that is consistent with our understanding of this accounting standard (GASB 68).

The annual actuarial valuation used as the basis for much of the information presented in this report was performed as of July 1, 2022. The valuation was based upon data, furnished by the Oklahoma Law Enforcement Retirement System staff, concerning active, inactive and retired members along with pertinent financial information. This information was reviewed for completeness and internal consistency, but was not audited by us. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. Please see the actuarial valuation for additional details on the funding requirements for the System including actuarial assumptions and methods and the Plan's funding policy.

To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. The calculations are based on the current provisions of the System, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of the System. In addition, the calculations were completed in compliance with applicable law and, in our opinion, meet the requirements of GASB 68.



Board of Trustees  
October 13, 2022  
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These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 68 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

We, Alisa Bennett, FSA, and Brent A. Banister, FSA, are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in this report or to provide explanations or further details as may be appropriate.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Alisa Bennett'.

Alisa Bennett, FSA, EA, FCA, MAAA  
President

A handwritten signature in blue ink that reads 'Brent A. Banister'.

Brent A. Banister, PhD, FSA, EA, FCA, MAAA  
Chief Actuary



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## GASB STATEMENT NO. 68

### OKLAHOMA LAW ENFORCEMENT RETIREMENT SYSTEM

#### SECTION I - SUMMARY OF PRINCIPAL RESULTS

<b>Valuation Date (VD):</b>	July 1, 2022
<b>Prior Measurement Date:</b>	June 30, 2021
<b>Measurement Date (MD):</b>	June 30, 2022
<b>Membership Data:</b>	
Retirees and Beneficiaries	1,589
Inactive Vested Members	35
Inactive Nonvested Members	21
Active Employees	<u>1,208</u>
Total	2,853
<b>Single Equivalent Interest Rate (SEIR):</b>	
Long-Term Expected Rate of Return	7.50%
Municipal Bond Index Rate at Prior Measurement Date	2.13%
Municipal Bond Index Rate at Measurement Date	3.37%
Year in which Fiduciary Net Position is Projected to be Depleted	N/A
Single Equivalent Interest Rate at Prior Measurement Date	7.50%
Single Equivalent Interest Rate at Measurement Date	7.50%
<b>Net Pension Liability:</b>	
Total Pension Liability (TPL)	\$1,271,355,120
Fiduciary Net Position (FNP)	<u>1,074,615,157</u>
Net Pension Liability (NPL = TPL – FNP)	\$196,739,963
FNP as a percentage of TPL	84.53%
<b>Pension Expense:</b>	\$36,172,680
<b>Deferred Outflows of Resources:</b>	\$216,193,445
<b>Deferred Inflows of Resources:</b>	\$137,050,137



## **SECTION II – INTRODUCTION**

The Governmental Accounting Standards Board issued Statement No. 68 (GASB 68), “*Accounting and Financial Reporting for Pensions*” in June 2012. GASB 68’s effective date for employers is the first fiscal year beginning after June 15, 2014. This report, prepared as of June 30, 2022 (the Measurement Date), presents information to assist the Oklahoma Law Enforcement Retirement System in providing the required information under GASB 68 to participating employers. Much of the material provided in this report, including the Net Pension Liability, is based on the results of the GASB 67 report for the Oklahoma Law Enforcement Retirement System, which was issued October 13, 2022. See that report for more information on the member data, actuarial assumptions and methods used in developing the GASB 67 results.

GASB 68 requires the inclusion of a Net Pension Liability (NPL) on the plan sponsor’s balance sheet and a determination of a Pension Expense (PE), which may bear little relationship to the funding requirements for the Oklahoma Law Enforcement Retirement System. In fact, it is possible in some years for the NPL to be an asset or the PE to be an income item. The NPL is set equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). The benefit provisions recognized in the calculation of the TPL are summarized in Appendix B.

PE includes amounts for Service Cost (the Normal Cost under Entry Age Normal (EAN) for the year), interest on the TPL, employee contributions, administrative expenses, other cash flows during the year, recognition of increases/decreases in the TPL due to changes in the benefit structure, actual versus expected experience, actuarial assumption changes, and recognition of investment gains/losses. The actual experience and assumption change impacts are recognized over the average expected remaining service life of the System membership as of the beginning of the measurement period, while investment gains/losses are recognized equally over five years. The development of the PE is shown in Section III. The unrecognized portions of each year’s experience, assumption changes and investment gains/losses are used to develop Deferred Inflows and Outflows of Resources, which also must be included on the employer’s Statement of Net Position.

Among the items needed for the TPL calculation is a discount rate, as defined by GASB, or a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan provisions applicable to the membership and beneficiaries of the System on the Measurement Date. Future contributions were projected to be made at the current levels set in statute. If the FNP is not projected to be depleted at any point in the future, the long-term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted at a future measurement date, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long-term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the monthly average of the Bond Buyers General Obligation 20-year



Municipal Bond Index Rate (formerly published monthly by the Board of Governors of the Federal Reserve System) (3.37%).

Our calculations indicated that the FNP is not projected to be depleted, so the Municipal Bond Index Rate is not used in the determination of the SEIR for either the June 30, 2021 or the June 30, 2022 TPL. The SEIR for both the Measurement Date and the Prior Measurement Date is 7.50%, the long-term assumed rate of return on investments and meets the requirements of GASB 67 and 68.

The FNP projections are based upon the Oklahoma Law Enforcement Retirement System financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67 and 68. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.

The sections that follow provide the results of all the required calculations, presented in the order laid out in GASB 68 for note disclosure and Required Supplementary Information (RSI).



### **SECTION III – PENSION EXPENSE**

As noted earlier, the collective Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost, which is the Normal Cost using the Entry Age Normal (EAN) actuarial funding method. The second item is interest on the TPL at the long term rate of return in effect as of the Prior Measurement Date.

The next three items refer to any changes that occurred in the TPL (i.e., actuarial accrued liability (AAL) under EAN) due to:

- benefit changes,
- actual versus expected experience, or
- changes in actuarial assumptions.

Benefit changes, which are reflected immediately, will increase PE if there is a benefit improvement for existing System members, or decrease PE if there is a benefit reduction. For the year ended June 30, 2022, there was one benefit change to be recognized. This change is detailed in Section V of this report.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire System membership at the beginning of the measurement period. The average expected remaining service life of active members is the average number of years the active members are expected to remain in covered employment. At the beginning of the measurement period, this number is 11.83. The average expected remaining service life of the inactive members is zero. Therefore, the recognition period is the weighted average of these two amounts, or 5.05 years.

The last item under changes in TPL is changes in actuarial assumptions or other inputs. There were a number of changes in the actuarial assumptions since the Prior Measurement Date which are summarized in Section V of this report. These changes will be recognized over the average expected remaining service life of the entire System membership, using the same approach applied to experience gains and losses, as described in the prior paragraph.

Member contributions for the year and projected earnings on the FNP at the long-term expected rate of return are subtracted from the amount determined thus far. One-fifth of current-period difference between projected and actual earnings on the FNP is recognized in the PE.

The current year portions of previously determined experience, assumption changes and earnings amounts, recognized as Deferred Outflows of Resources and Deferred Inflows of Resources are included next. Deferred Outflows of Resources are added to the PE while Deferred Inflows of Resources are subtracted from the PE. Finally, administrative expenses and other miscellaneous items are included.

The calculation of the collective PE for the year ended June 30, 2022 is shown in the following table.





**Pension Expense**  
**For the Year Ended June 30, 2022**

	2022
Service Cost	\$21,066,397
Interest on the Total Pension Liability	91,371,141
Current-period Benefit Changes	310,979
Expensed portion of current-period difference between expected and actual experience in the total pension liability	(1,500,036)
Expensed portion of current-period changes of assumptions	(2,020,922)
Member Contributions	(6,714,155)
Projected Earnings on Plan Investments	(91,837,803)
Expensed portion of current-period differences between actual and projected earnings on plan investments	44,045,127
Administrative Expense	1,505,098
Other	0
Recognition of beginning deferred outflows of resources as pension expense	24,000,129
Recognition of beginning deferred inflows of resources as pension expense	(44,053,275)
<b>Total Pension Expense</b>	<b>\$36,172,680</b>

Note: Average expected remaining service life for all members is 5.05.



## SECTION IV – NOTES TO FINANCIAL STATEMENTS

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference.

**Paragraph 37:** The information required is to be prepared by the System and employer.

**Paragraph 38:** The information required is to be prepared by the System and employer.

**Paragraph 39:** Not Applicable.

**Paragraph 40(a) – (b):** The information required is to be supplied by the System.

**Paragraph 40(c):** The data required regarding the membership of the System were furnished by the System. The following table summarizes the membership of the System as of July 1, 2022, the date of the valuation used to determine the June 30, 2022 Total Pension Liability.

### Membership

Number as of July 1, 2022	
Inactive Members Or Their Beneficiaries	1,589
Currently Receiving Benefits	
Inactive Members Entitled To But Not Yet Receiving Benefits	35
Nonvested Terminations	21
Active Members	1,208
Total	2,853

**Paragraph 40(d) – (e):** The information required is to be supplied by the System.



**Paragraph 41:** This paragraph requires information to be disclosed regarding the actuarial assumptions and other inputs used to measure the TPL. The complete set of actuarial assumptions and other inputs utilized in developing the TPL are outlined in Appendix C. The TPL as of June 30, 2022 was determined based on an actuarial valuation prepared as of July 1, 2022, using the following actuarial assumptions and other inputs:

Price Inflation	2.75 percent
Salary increases, including price inflation	3.50 to 10.00 percent
Long-term Rate of Return, net of investment expense, including price inflation	7.50 percent
Municipal Bond Index Rate	
Prior Measurement Date	2.13 percent
Measurement Date	3.37 percent
Year FNP is projected to be depleted	N/A
Single Equivalent Interest Rate, net of plan investment expense, including price inflation	
Prior Measurement Date	7.50 percent
Measurement Date	7.50 percent

Mortality

Pre-retirement mortality rates were based on the Pub-2010 Public Safety Employees Amount-Weighted Mortality Table with rates set forward two years, projected generationally using Scale MP-2021.

Post-retirement mortality rates were based on the Pub-2010 Public Safety Retirees Amount-Weighted Mortality Table with rates set forward two years, projected generationally using Scale MP-2021.

Disabled mortality rates were based on the Pub-2010 Public Safety Disabled Retirees Amount-Weighted Mortality Table with rates set forward two years, projected generationally using Scale MP-2021.

Survivor mortality rates were based on the Pub-2010 Public Safety Contingent Survivors Amount-Weighted Mortality Table with rates set forward two years, projected generationally using Scale MP-2021.



The actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience study, which covered the five-year period ending June 30, 2021. The experience study report is dated June 3, 2022.

**Paragraph 42:**

**(a) Discount rate (SEIR).** The discount rate used to measure the TPL at June 30, 2022 was 7.50%. There was no change in the discount rate since the Prior Measurement Date.

**(b) Projected cash flows.** The projection of cash flows used to determine the discount rate assumed that plan contributions from members, state agencies, insurance premium taxes and other state sources will be made at the current contribution rates as set out in state statute:

- a. Employee contribution rate: 8.00% of paid salary.
- b. State contributions: License Agency Fees equal to 1.20% of Driver's License Taxes, plus 5.00% of Insurance Premium Tax (5.25% for 2023 through 2027).
- c. Agency contribution rate: 11.00% of actual base salary. For projection purposes, contributions on DOP pay are excluded.
- d. Administrative expenses in the prior year were projected forward with price inflation as an estimate for administrative expenses in current and future years. The portion of expenses in future years allocated to the current members was based on the proportionate share of covered payroll in each year for the remainder of the existing members to the total covered payroll for all members.
- e. Both pension and OPEB benefits are paid by the trust as a whole.

Based on those assumptions, the System's FNP was projected to be available to make all projected future benefit payments of current System members. Therefore, the long-term expected rate of return on System investments of 7.50% was applied to all periods of projected benefit payments to determine the TPL.

The FNP projections are based upon the System's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67 and 68. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing System basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.

**(c) Long-term rate of return.** The long-term expected rate of return on pension plan investments is reviewed as part of the experience study. Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), along with estimates of variability and correlations for each asset class, were developed by the System's investment consultant. These ranges were combined to develop the long-term expected rate of return by weighting the expected



future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by investment consultants are often intended for use over a 10-year investment horizon and are not always useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The long-term rate of return assumption is intended to be a long-term assumption (30 to 50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

**(d) Municipal bond rate.** A municipal bond rate was not used in determining the discount rate. If it were required, the rate would be 3.37% on the Measurement Date.

**(e) Period of projected benefit payments.** Projected future benefit payments for all current plan members until benefit payments ran out.

**(f) Assumed asset allocation.** The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as of the most recent experience study, as provided by the System's investment consultant, ACG, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Core Bonds	5%	0.00%
Core Plus	10%	2.58%
Multi-Sector	5%	2.88%
U.S. Large Cap Equity	20%	3.53%
U.S. Small Cap Equity	10%	7.13%
International Developed Equity	15%	8.53%
Emerging Market Equity	5%	7.99%
Long/Short Equity	5%	9.23%
Private Equity	10%	5.68%
Core Real Estate	10%	10.47%
Value Added Real Estate	<u>5%</u>	6.60%
Total	100%	

\*Arithmetic mean



**(g) Sensitivity analysis.** This paragraph requires disclosure of the sensitivity of the NPL to changes in the discount rate. The following presents the NPL of the System, calculated using the discount rate of 7.50 percent, as well as the System's NPL calculated using a discount rate that is 1-percentage-point lower (6.50 percent) or 1-percentage-point higher (8.50 percent) than the current rate.

	<b>1% Decrease (6.50%)</b>	<b>Current Discount Rate (7.50%)</b>	<b>1% Increase (8.50%)</b>
Total Pension Liability	\$1,415,058,995	\$1,271,355,120	\$1,152,793,138
Plan Fiduciary Net Position	<u>1,074,615,157</u>	<u>1,074,615,157</u>	<u>1,074,615,157</u>
Net Pension Liability	\$340,443,838	\$196,739,963	\$78,177,981

**Paragraph 43:** The required information will be supplied by the System.



**Paragraph 44:** This paragraph requires a schedule of changes in Net Pension Liability. The needed information is provided in the table below for fiscal year ended June 30:

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2021	\$1,258,688,464	\$1,245,241,476	\$13,446,988
Changes for the year:			
Service cost	21,066,397		21,066,397
Interest	91,371,141		91,371,141
Benefit changes	310,979		310,979
Difference between expected and actual experience	(7,575,181)		(7,575,181)
Changes in assumptions	(10,205,656)		(10,205,656)
Contributions - employer		9,568,211	(9,568,211)
Contributions - non-employer		25,285,271	(25,285,271)
Contributions - member		6,714,155	(6,714,155)
Net investment income		(128,387,834)	128,387,834
Benefit payments, including refunds of employee contributions	(82,301,024)	(82,301,024)	0
Administrative expense		(1,505,098)	1,505,098
Other changes		0	0
Net changes	<u>12,666,656</u>	<u>(170,626,319)</u>	<u>183,292,975</u>
Balances at June 30, 2022	\$1,271,355,120	\$1,074,615,157	\$196,739,963



**Paragraph 45:**

(a) The Measurement Date of the collective NPL is June 30, 2022. The TPL as of June 30, 2022 was determined based on the annual actuarial funding valuation report prepared as of July 1, 2022.

(b) There is no special funding situation.

(c) There were a number of changes in the actuarial assumptions that affected the measurement of the TPL since the Prior Measurement Date. These changes are summarized in Section V of this report.

(d) There was one change in the benefit terms that affected measurement of the TPL since the Prior Measurement Date. This change is summarized in Section V of this report.

(e) This information will be supplied by the System.

(f) The information will be supplied by the System and employer.

(g) Please see Section III for the development of the PE.

(h) Since certain expense items are recognized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce PE they are labeled Deferred Inflows of Resources. If they will increase PE they are labeled Deferred Outflows of Resources. The recognition of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are recognized over the average expected remaining service life of the active and inactive Plan members at the beginning of the measurement period. Investment gains and losses are recognized equally over a five-year period.





The following tables provide a summary of the amounts of the Deferred Outflows of Resources and Deferred Inflows of Resources as of the Measurement Date (June 30, 2022). Per GASB 68, reporting of the differences between projected and actual earnings should be on a net basis, with only one Deferred Outflow or Inflow. This information is provided in the following table.

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Net Deferred Outflows/(Inflows) of Resources</b>
Differences between expected and actual experience	\$8,091,756	\$6,715,674	\$1,376,082
Changes of assumptions	0	8,184,734	(8,184,734)
Differences between projected and actual earnings	<u>208,101,689</u>	<u>122,149,729</u>	<u>85,951,960</u>
Total	\$216,193,445	\$137,050,137	\$79,143,308



The following tables show the Deferred Outflows of Resources and Deferred Inflows of Resources separately to provide additional detail.

<b>Deferred Outflows of Resources</b>					
	<b>June 30, 2021</b>	<b>Additions</b>	<b>Recognition</b>	<b>June 30, 2022</b>	
<b>Differences between expected and actual experience</b>					
FY 2017 Base	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
FY 2018 Base	0	0	0	0	0
FY 2019 Base	6,222,395	0	2,550,163	3,672,232	3,672,232
FY 2020 Base	6,419,309	0	1,999,785	4,419,524	4,419,524
FY 2021 Base	0	0	0	0	0
FY 2022 Base	0	0	0	0	0
Total	<u>\$ 12,641,704</u>	<u>\$ 0</u>	<u>\$ 4,549,948</u>	<u>\$ 8,091,756</u>	<u>\$ 8,091,756</u>
<b>Changes of assumptions</b>					
FY 2017 Base	\$ 95,087	\$ 0	\$ 95,087	\$ 0	\$ 0
FY 2018 Base	0	0	0	0	0
FY 2019 Base	0	0	0	0	0
FY 2020 Base	0	0	0	0	0
FY 2021 Base	0	0	0	0	0
FY 2022 Base	0	0	0	0	0
Total	<u>\$ 95,087</u>	<u>\$ 0</u>	<u>\$ 95,087</u>	<u>\$ 0</u>	<u>\$ 0</u>
<b>Differences between projected and actual earnings</b>					
FY 2018 Base	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
FY 2019 Base	13,578,025	0	6,789,012	6,789,013	6,789,013
FY 2020 Base	37,698,248	0	12,566,082	25,132,166	25,132,166
FY 2021 Base	0	0	0	0	0
FY 2022 Base	0	220,225,637	44,045,127	176,180,510	176,180,510
Total	<u>\$ 51,276,273</u>	<u>\$ 220,225,637</u>	<u>\$ 63,400,221</u>	<u>\$ 208,101,689</u>	<u>\$ 208,101,689</u>
Total	<u>\$ 64,013,064</u>	<u>\$ 220,225,637</u>	<u>\$ 68,045,256</u>	<u>\$ 216,193,445</u>	<u>\$ 216,193,445</u>



Deferred Inflows of Resources				
	June 30, 2021	Additions	Recognition	June 30, 2022
<b>Differences between expected and actual experience</b>				
FY 2017 Base	\$ 198,211	\$ 0	\$ 198,211	\$ 0
FY 2018 Base	1,705,621	0	1,072,718	632,903
FY 2019 Base	0	0	0	0
FY 2020 Base	0	0	0	0
FY 2021 Base	9,979	0	2,353	7,626
FY 2022 Base	0	7,575,181	1,500,036	6,075,145
Total	\$ 1,913,811	\$ 7,575,181	\$ 2,773,318	\$ 6,715,674
<b>Changes of assumptions</b>				
FY 2017 Base	\$ 0	\$ 0	\$ 0	\$ 0
FY 2018 Base	0	0	0	0
FY 2019 Base	0	0	0	0
FY 2020 Base	0	0	0	0
FY 2021 Base	0	0	0	0
FY 2022 Base	0	10,205,656	2,020,922	8,184,734
Total	\$ 0	\$ 10,205,656	\$ 2,020,922	\$ 8,184,734
<b>Differences between projected and actual earnings</b>				
FY 2018 Base	\$ 2,063,416	\$ 0	\$ 2,063,416	\$ 0
FY 2019 Base	0	0	0	0
FY 2020 Base	0	0	0	0
FY 2021 Base	162,866,306	0	40,716,577	122,149,729
FY 2022 Base	0	0	0	0
Total	\$ 164,929,722	\$ 0	\$ 42,779,993	\$ 122,149,729
Total	\$ 166,843,533	\$ 17,780,837	\$ 47,574,233	\$ 137,050,137



(i): Collective amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in PE in future years as follows:

<b>Year Ended June 30:</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Net Deferred Outflows/(Inflows) of Resources</b>
2023	\$67,950,170	\$44,872,791	\$23,077,379
2024	59,733,065	44,239,888	15,493,177
2025	44,465,081	44,239,886	225,195
2026	44,045,129	3,521,525	40,523,604
2027	0	176,047	(176,047)
Thereafter	0	0	0

(j). This will be provided by the System.



## **SECTION V – REQUIRED SUPPLEMENTARY INFORMATION**

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

**Paragraphs 46(a) - (c):** The required tables of schedules are provided in Appendix A.

**Paragraph 47:** Significant methods and assumptions used in calculating the actuarially determined contributions, if any, should be presented as notes to the schedule required by paragraph 46(c). In addition, for each of the schedules required by paragraph 46, information should be presented about factors that significantly affect trends in the amounts reported.

***Changes of benefit terms:*** The following changes to the plan provisions were made by the Oklahoma Legislature and reflected in the valuation performed as of July 1 listed below:

- 2022: House Bill 2065 reinstated the postretirement benefit adjustment for certain duty-related disability and survivor benefits.
- 2021: House Bill 2893 granted the System 5.0% of the insurance premium tax for FY 2022. The allocation had been 5.0% through July 1, 2020, and then reduced to 3.5% for the remainder of FY 2021.
- 2020: House Bill 3350 provided a one-time benefit increase as of July 1, 2020. Members who retired on or prior to July 1, 2015 received a 4.0% benefit increase. Members who retired between July 1, 2015 and July 1, 2018 received a 2.0% benefit increase. Members who retired after July 1, 2018 did not receive a benefit increase.
- 2018: House Bill 1340, enacted in 2018, provided a stipend for members of each system who have been retired for five years as of October 1, 2018. The stipend amount was based on the funding level of the system. OLEERS members received the lesser of 2% of the gross annual retirement amount or \$1,200. The bill also provided a minimum payment of \$350 for members with 20 years of service. The effective date of the stipend was October 1, 2018.
- 2014: House Bill 2622 reset the amortization period of the unfunded actuarial liability to 15 years effective July 1, 2014.



***Changes in actuarial assumptions and methods:***

7/1/2022 valuation:

- Change mortality assumption to the new Pub-2010 tables.
- Salary scale assumption was revised.
- Withdrawal rates were revised.
- Disability rates were revised.
- The percent of members electing retroactive DOP was increased to 80% for a period of 4 years, and the percent of members electing an immediate annuity was set to 20%.

7/1/2017 valuation:

- Price Inflation was lowered from 3.00% to 2.75%.
- Interest Credit on DOP balances was increased from 8.00% to 11.00%.
- Change mortality assumption to reflect recent mortality improvements.
- Salary scale assumption was revised.
- Retirement rates were revised.
- Withdrawal rates were revised.
- Disability rates were revised.
- Include a salary increase reserve to stabilize liabilities with the historical pattern of infrequent, but large, across-the-board pay increases.



***Method and assumptions used in calculations of actuarially determined contributions.***

The System is funded with fixed contribution rates for the employees and the agencies, as well additional state contributions based on driver's license and insurance premium taxes. The Actuarially Determined Contributions in the *Schedule of Employer Contributions* are calculated as of the beginning of the fiscal year in which contributions are reported.

The following actuarial methods and assumptions (from the July 1, 2021 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for Fiscal Year End 2022 in that schedule:

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Remaining amortization period	8 years
Asset valuation method	5-year moving average
Price Inflation	2.75 percent
Salary increase, including price inflation	3.50 to 9.75 percent
Long-term Rate of Return, net of investment expense, including price inflation	7.50 percent
Cost-of-living adjustment	3.00 percent for those eligible

Please see the information presented earlier in regard to Paragraph 47 for detailed information on the benefit changes and assumption changes that may have impacted the Actuarially Determined Contributions shown in the *Schedule of Employer Contributions*.

It should be noted that the funding valuation develops a combined pension and OPEB rate.



**APPENDIX A**

**Exhibit A**

**GASB 68 Paragraphs 46(a) – (b)  
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY**

**Fiscal Year Ended June 30**

	2022	2021	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>									
Service Cost	\$21,066,397	\$21,974,720	\$21,897,472	\$22,215,130	\$22,653,979	\$23,670,205	\$23,126,147	\$22,087,084	\$20,293,772
Interest	91,371,141	88,833,680	84,761,418	80,698,081	78,022,205	75,079,775	72,766,188	66,613,699	64,958,743
Benefit term changes	310,979	0	5,382,346	0	832,135	0	0	0	0
Differences between expected and actual experience	(7,575,181)	(12,332)	10,418,879	13,872,884	(5,996,493)	(2,306,866)	6,137,500	51,089,996	(9,770,969)
Assumption changes	(10,205,656)	0	0	0	0	1,106,642	0	0	0
Benefit payments, including member refunds	<u>(82,301,024)</u>	<u>(71,815,037)</u>	<u>(64,641,252)</u>	<u>(60,647,483)</u>	<u>(59,048,384)</u>	<u>(57,612,291)</u>	<u>(58,347,884)</u>	<u>(57,188,272)</u>	<u>(49,776,641)</u>
<b>Net change in Total Pension Liability</b>	\$12,666,656	\$38,981,031	\$57,818,863	\$56,138,612	\$36,463,442	\$39,937,465	\$43,681,951	\$82,602,507	\$25,704,905
<b>Total Pension Liability - beginning*</b>	\$1,258,688,464	\$1,219,707,433	\$1,161,888,570	\$1,105,749,958	\$1,069,286,516	\$1,029,349,051	\$998,862,371	\$916,259,864	\$890,554,959
<b>Total Pension Liability - ending (a)</b>	\$1,271,355,120	\$1,258,688,464	\$1,219,707,433	\$1,161,888,570	\$1,105,749,958	\$1,069,286,516	\$1,042,544,322	\$998,862,371	\$916,259,864
<b>Plan Fiduciary Net Position</b>									
Employer contributions	\$9,568,211	\$9,877,785	\$9,503,466	\$8,921,728	\$9,082,750	\$9,262,357	\$10,219,356	\$9,438,391	\$8,566,411
Non-employer contributions - Direct Aid (State/City/District)	25,285,271	20,767,474	24,382,470	24,040,441	23,673,616	21,842,260	22,980,649	22,861,107	21,164,877
Employee contributions	6,714,155	6,646,904	6,770,157	6,691,115	6,666,814	6,832,480	6,866,274	6,389,911	5,787,446
Net investment income	(128,387,834)	277,533,634	12,480,383	40,137,712	80,005,080	106,518,842	(22,244,141)	34,802,362	121,401,449
Benefit payments, including member refunds	(82,301,024)	(71,815,037)	(64,641,252)	(60,647,483)	(59,048,384)	(57,612,291)	(58,347,884)	(57,188,272)	(49,776,641)
Administrative expenses	(1,505,098)	(1,431,482)	(1,478,750)	(1,130,411)	(1,091,870)	(1,082,669)	(1,031,334)	(1,069,278)	(926,612)
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Net change in Plan Fiduciary Net Position</b>	(\$170,626,319)	\$241,579,278	(\$12,983,526)	\$18,013,102	\$59,288,006	\$85,760,979	(\$41,557,080)	\$15,234,221	\$106,216,930
<b>Plan Fiduciary Net Position – beginning</b>	\$1,245,241,476	\$1,003,662,198	\$1,016,645,724	\$998,632,622	\$939,344,616	\$853,583,637	\$895,140,717	\$879,906,496	\$773,689,566
<b>Plan Fiduciary Net Position - ending (b)</b>	\$1,074,615,157	\$1,245,241,476	\$1,003,662,198	\$1,016,645,724	\$998,632,622	\$939,344,616	\$853,583,637	\$895,140,717	\$879,906,496
<b>Net Pension Liability - ending (a) - (b)</b>	\$196,739,963	\$13,446,988	\$216,045,235	\$145,242,846	\$107,117,336	\$129,941,900	\$188,960,685	\$103,721,654	\$36,353,368
<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>	84.53%	98.93%	82.29%	87.50%	90.31%	87.85%	81.88%	89.62%	96.03%
<b>Covered payroll</b>	\$86,747,818	\$85,003,741	\$87,673,889	\$85,407,024	\$86,121,195	\$86,495,680	\$88,682,733	\$84,879,915	\$76,838,068
<b>Employers' Net Pension Liability as a percentage of covered payroll</b>	226.80%	15.82%	246.42%	170.06%	124.38%	150.23%	213.07%	122.20%	47.31%

Note: Schedule is intended to show 10-year trend. Additional years will be reported as they become available.

\* 2017 beginning of year amounts were restated to exclude the Medical Supplement.





## Exhibit B

### GASB 68 Paragraphs 46(c) SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30  
(\$ in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined employer contribution	\$35,628	\$37,289	\$34,527	\$31,265	\$32,467	\$33,110	\$33,291	\$31,838	\$43,775	\$44,734
Actual employer contributions	<u>34,853</u>	<u>30,645</u>	<u>33,886</u>	<u>32,962</u>	<u>32,756</u>	<u>31,105</u>	<u>33,200</u>	<u>32,299</u>	<u>29,731</u>	<u>28,103</u>
Annual contribution deficiency (excess)	<u>\$774</u>	<u>\$6,643</u>	<u>\$641</u>	<u>(\$1,697)</u>	<u>(\$289)</u>	<u>\$2,006</u>	<u>\$91</u>	<u>(\$461)</u>	<u>\$14,044</u>	<u>\$16,631</u>
Covered payroll	\$86,748	\$85,004	\$87,674	\$85,407	\$86,121	\$86,496	\$88,683	\$84,880	\$76,838	\$73,423
Actual contributions as a percentage of covered payroll	40.18%	36.05%	38.65%	38.59%	38.04%	35.96%	37.44%	38.05%	38.69%	38.28%

Note: 2017 was the first year to exclude the Medical Supplement.



## **APPENDIX B**

### **SUMMARY OF MAIN BENEFIT PROVISIONS**

For purposes of this report, the post-retirement medical benefit is excluded for liabilities. The full benefit provisions are included because they are relevant for assumptions and funding provisions.

- Effective Date and Plan Year:** The System became effective July 1, 1947. The System was originally known as the Oklahoma Public Safety Retirement System. The plan year is July 1 to June 30.
- Administration:** The System is administered by the Oklahoma Law Enforcement Retirement Board consisting of thirteen Members. The Board acts as the fiduciary for investment and administration of the System.
- Plan Type:** Defined benefit plan.
- Eligibility:** All law enforcement officers of the Oklahoma Highway Patrol (OHP) and Capitol Patrol of Department of Public Safety, Oklahoma State Bureau of Investigation (OSBI), Oklahoma State Bureau of Narcotics and Dangerous Drugs Control (OBND), Alcoholic Beverage Laws Enforcement Commission (ABLE), members of the DPS Communications Division (Communications), DPS Waterways Lake Patrol Tourism and Recreation Department (Rangers), Inspectors of the Oklahoma State Board of Pharmacy (Pharmacy Inspectors), and Gun Smiths of DPS are eligible upon employment.
- Credited Service:** Credited Service shall consist of the period during which the Member participated in the System or the predecessor Plan as an active employee in an eligible membership classification, plus any service prior to the establishment of the predecessor Plan which was credited under the predecessor Plan for officers of the OSBI and the OBND who became Members of the System on July 1, 1980, any service credited under the Oklahoma Public Employees Retirement System (OPERS) as of June 30, 1980, and for Members of Communications and Lake Patrol who became Members of the System on July 1, 1981, any service credited under the predecessor Plan or OPERS as of June 30, 1981, and for law enforcement officers of ABLE who became Members of the System on July 1, 1982 any service credited under OPERS as of June 30, 1982, and for Rangers who became Members of the System on July 1, 1985, any service credited under OPERS as of June 30, 1985, and for Pharmacy Inspectors who became Members of the System on July 1, 1986, any service credited under OPERS as of June 30, 1986 and for Capitol Patrol who became Members of the System on July 1, 1993, any service credited under OPERS as of June 30, 1993 and for Gun Smiths who became Members of the System on July 1, 1994, any service credited under OPERS as of July 1, 1994.



Members can accumulate up to one year of sick leave which counts for pension accrual and benefits eligibility purposes. Members may also buy back service with other Oklahoma State Retirement Systems.

**Salary:**

The actual paid base salary received by a Member, excluding payment for any accumulated leave or uniform allowance. Lump sum bonuses based on longevity date go into considered compensation. The lump sum bonus is \$250 after 2 or 3 years, \$426 after 4 or 5 years, \$626 after 6 or 7 years, and so on. If an employee incurs a break in service in excess of 30 days, his longevity date is changed to his date of rehire and the longevity bonus amount becomes \$0. If an employee incurs a break in service of less than 30 days or is on a leave of absence without pay for more than 30 days, his length of absence is deducted from his longevity date and the longevity bonus amount remains the same.

Final average salary is the average of the highest 30 consecutive complete months of considered salary.

Effective July 1, 2002:

Members whose salary is set by statute and retire after 20 years receive a benefit based on the greater of the member's highest 30 consecutive months or the top base pay paid to active members at time of payment. This benefit has been eliminated for certain members hired on or after November 1, 2012 and all other members hired after May 13, 2013.

Members whose salary is not set by statute and who retire after 20 years receive a benefit based on the greater of the member's highest 30 consecutive months or the salary paid to the highest non-supervisory position in the participating agency at the time payment is made. This benefit has been eliminated for certain members hired on or after November 1, 2012 and all other members hired after May 13, 2013.

**State Contributions:**

License Agency Fees equal to 1.2% of Driver's License Taxes, plus 5% of Insurance Premium Tax (5.25% for 2023 through 2027).

**Agency Contributions:**

10% of actual base salary until October 31, 2012 and 11% of actual base salary as of November 1, 2012.

**Member Contributions:**

8% percent of paid salary. Accumulated contributions are after-tax up to December 31, 1989 and before-tax after December 31, 1989.



**Normal Retirement Benefit:**

Normal Retirement Eligibility: 20 years of service or age 62 with 10 years of service. Maximum of age 60 with 20 years of service, unless considered physically able to continue.

Benefit Amount: 2 1/2% of the greater of final average salary or the salary paid to active employees as described under “salary considered” multiplied by the years and completed months of credited service. There is no maximum on service.

Normal Form of Benefit: 100% joint and survivor.

The benefit is paid as a Joint and 100% Survivor Annuity if the Member was married 30 months prior to death. The Joint and Survivor portion will continue to the member’s children until reaching age 22 if there is no eligible spouse or after the spouse has died.

**Termination Benefit:**

Less than 10 Years of Service: Refund of contributions without interest.

More than 10 Years of Service: If greater than 10 years of service, but not eligible for the normal retirement benefit, the benefit is payable at the date the Member would have had 20 years of service in an amount equal to 2 1/2% of the greater of final average salary or the salary paid to active employees as described under “salary considered” multiplied by the years and completed months of credited service.

Form of Benefit: Lifetime annuity.

**Disability Benefit (Duty):** Upon determination of disability incurred in the line of duty, the normal disability benefit is the greater of:

- 1) 2 1/2% of the greater of final average salary or the salary paid to active employees as described under “salary considered” times years and completed months of credited service, or
- 2) 50% of final average salary.

For members with less than 20 years of service that incur a line of duty disability due to personal injury of a catastrophic nature, final average salary is based on the salary which the member would have received pursuant to statutory salary schedules in effect upon the date of death for a twenty (20) years of service member.



**Disability Benefit (Non-Duty):**

Upon determination of disability not in the line of duty, and after three years of service, the accrued benefit equals 2 1/2% of the greater of final average salary or the salary paid to active employees as described under “salary considered” times years and completed months of credited service.

**Death Benefits Payable to Beneficiaries:**

Prior to Retirement (Duty):

The greater of:

- 1) 2 1/2% of the greater of final average salary or the salary paid to active employees as described under “salary considered” times years and completed months or credited service, or
- 2) 50% of final average salary.

For members with less than 20 years of service that die in the line of duty, final average salary is based on the salary which the member would have received pursuant to statutory salary schedules in effect upon the date of death for a twenty (20) years of service member.

Prior to Retirement (Non-Duty):

After three years of service, the greater of:

- 1) 2 1/2% of the greater of final salary or the salary paid to active employees as described under “salary considered” times years and completed months of credited service, or
- 2) 50% of final average salary.

After Retirement:

In addition to the benefits provided under the 100% Joint and Survivor Annuity, \$400 per month is paid for each surviving child to age 18, or to age 22 if a full-time student.

Lump Sum:

The beneficiary shall receive a lump-sum amount of \$5,000. Effective July 1, 2002, this lump sum is considered to be life insurance proceeds for tax purposes.

If an active Members dies prior to retirement without leaving a beneficiary, a refund of the accumulated contributions will be paid to the estate.

If the beneficiary is a child, the benefits are payable to age 18, or to age 22 if a full-time student. If the beneficiary is a spouse to whom the Member was married for at least 30 months prior to death, if the death was not duty related, the benefits are payable for life.



**Postretirement Adjustments:**

Occasional ad hoc increases for retirees are provided. COLAs apply to the whole benefit, not the original benefit. The most recent COLA was 4% for Members retired as of June 30, 2007, effective July 1, 2008.

Effective July 1, 2002, retirement benefits will be recalculated to increase in conjunction with increases to the top base pay for active members. Certain members hired on or after November 1, 2012 will not be eligible for this adjustment.

**Postretirement Health Insurance Benefits:**

The System will contribute \$105 per month or the Medicare Supplement Premium, if less, toward the cost of health insurance for annuitants receiving retirement benefits. These benefits commence upon retirement. Spouses are eligible to continue this benefit after the member's death.

**Deferred Option Plan:**

A Member with 20 or more years of service may elect to participate in the Deferred Option Plan (DOP). Participation in the DOP shall not exceed five years. The members' contributions cease upon entering the Plan, but the agency contributions are divided equally between the Retirement System and Deferred Option Plan. The monthly retirement benefits that the member is eligible to receive are paid into the Deferred Option Plan account.

Members can elect to retroactively join the DOP as of a back-drop-date which is no earlier than the member's normal retirement date or five years before his termination date. The monthly retirement benefits and employee contributions that would have been payable had the member elected to join the DOP are credited to the member's DOP account with interest.

The retirement benefits are not recalculated for service and salary past the election date to join the Deferred Option Plan. However, the benefits are increased by cost-of-living increases applicable to retired members during the DOP period.

When the Member actually terminates employment, the Deferred Option Plan account balance may be paid in a lump sum or to an annuity provider. Monthly retirement benefits are then paid directly to the retired Member.

This Plan became effective during the July 1, 1991 to June 30, 1992 Plan Year. The Deferred Option Plan account is guaranteed a minimum of the valuation interest rate for investment return, or 2% less than the fund rate of return, if greater.



## APPENDIX C

### STATEMENT OF ACTUARIAL ASSUMPTIONS

#### Economic Assumptions

- |                                     |  |
|-------------------------------------|--|
| 1. Price Inflation                  | 2.75%  |
| 2. Long-term Assumed Rate of Return | 7.50%, net of investment expenses, per annum, compound annually. |
| 3. Wage Inflation                   | 3.50%  |
| 4. Cost-of-Living Assumption        | 3.00%  |
| 5. Interest credit on DOP balance   | 11.00%   |
| 6. Salary Scale                     | Sample rates are shown below:                                    |

Attained Service	Wage Inflation%	Merit %	Increase %
0	3.50	6.50	10.00
5	3.50	3.75	7.25
10	3.50	0.75	4.25
15	3.50	0.25	3.75
20	3.50	0.20	3.70
25 or more	3.50	0.00	3.50



## Demographic Assumptions

### 1. Retirement Rates

Sample rates are shown below:

Attained Service	Annual Rates of Retirement
20	0.10
21	0.10
22	0.10
23	0.10
24	0.10
25	0.15
26	0.15
27	0.15
28	0.15
29	0.20
30	0.25
31	0.30
32	0.35
33	0.45
34	0.60
Over 34	1.00

or 100% at age 75 without regard to years of service.

### 2. Mortality Rates

#### (a) Active participants

Pub-2010 Public Safety Employees Amount-Weighted Mortality Table with rates set forward 2 years, projected generationally using Scale MP-2021

All pre-retirement deaths are assumed to occur in the line of duty.

#### (b) Active participants (post-retirement) and nondisabled pensioners

Pub-2010 Public Safety Retirees Amount-Weighted Mortality Table with rates set forward 2 years, projected generationally using Scale MP-2021

#### (c) Disabled pensioners

Pub-2010 Public Safety Disabled Retirees Amount-Weighted Mortality Table with rates set forward 2 years, projected generationally using Scale MP-2021

#### (d) Survivors

Pub-2010 Public Safety Contingent Survivors Amount-Weighted Mortality Table with rates set forward 2 years, projected generationally using Scale MP-2021





### 3. Disability Rates

Sample rates are shown below:

Age	Rate
20	0.0002
30	0.0007
40	0.0022
50	0.0065
60	0.0220

50% of disabilities are assumed to be Non-Duty related and 50% are assumed to be Duty related.

### 4. Withdrawal Rates

Sample rates are shown below:

Service Range	Rate
0	0.1200
2	0.0600
4	0.0400
6	0.0200
8	0.0200
10	0.0175
15	0.0150
20 and over	0.0000

### 5. Marital Status

(a) Percentage married:

Males: 85%; Females: 85%

(b) Age difference:

Males are assumed to be three (3) years older than females.

### **Other Assumptions:**

1. Deferred Benefits Begin at:

Age 50.

2. Provision for Expenses:

Administrative Expenses, as budgeted by the Oklahoma Law Enforcement Retirement System.

3. Retiree Medical:

75% of active, terminated vested, and DOP members are assumed to elect the \$105 per month retiree medical benefit upon retirement, and their surviving spouses are assumed to continue the benefit.



#### 4. Deferred Option Plan:

A member is allowed to retroactively elect to join the DOP as of a back-drop-date which is no earlier than the member's normal retirement date or five years before his termination date. The monthly retirement benefits and employee contributions that would have been payable had the member elected to join the DOP are credited to the member's DOP account with interest. The retirement benefits are not recalculated for service and salary past the election date to join the DOP. However, the benefits may be increased by any applicable cost-of-living increases.

The retirement rates reflect both regular retirement and entry into the DOP. We assume that 80% of active members who retire elect to retroactively enter into the DOP for four years, prior to electing a lump sum and 20% elect to begin an immediate annuity.

#### 5. Cost-of-Living Allowance:

Members eligible for the automatic cost-of-living increase are assumed to have their benefits increase by 3.00% per year.

Members not eligible for the automatic cost-of-living increase are assumed to receive the greater of:

- (i) their benefit calculated using their actual final average earnings.
- (ii) their benefit calculated using the top base pay for active members, assuming 3.00% annual increases in the top base pay, if eligible.