# Cavanaugh Macdonald 

 CONSULTING, LLCThe experience and dedication you deserve

# OKLAHOMA POLICE PENSION 

AND RETIREMENT SYSTEM

GASB STATEMENT NO. 67 REPORT

PREPARED AS OF JUNE 30, 2022


# Cavanaugh Macdonald 

C O N SULTIN G, LLC
The experience and dedication you deserve

September 8, 2022
Ms. Ginger Sigler
Executive Director
Oklahoma Police Pension and Retirement System
1001 NW $63^{\text {rd }}$ Street, Suite 305
Oklahoma City, OK 73116-7335
Dear Ms. Sigler:
Presented in this report is information to assist the Oklahoma Police Pension and Retirement System in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. The information is presented for the June 30, 2022 Measurement Date. The calculations in this report have been made on a basis that is consistent with our understanding of this accounting standard (GASB 67).

The annual actuarial valuation used as a 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 System's 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 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 67.

September 8, 2022
Page 2

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. In particular, any measurements of the funded status of the System may not be indicative of the ability of the System to settle its obligations or of the need for future contributions. Calculations for purposes other than satisfying the requirements of GASB 67 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, Brent Banister, FSA, and Aaron Chochon, ASA, 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,


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


Aaron Chochon, ASA, EA, FCA, MAAA Associate Actuary

## TABLE OF CONTENTS

| Section | Item | Page No. |
| :--- | :--- | :---: |
|  | Summary of Principal Results | 1 |
| I | Introduction | 2 |
| II | Notes to Financial Statements | 4 |
|  | Required Supplementary Information | 9 |

## Appendix

A
Required Supplementary Information Tables
11
Exhibit A - Schedule of Changes in the Net Pension Liability
Exhibit B - Schedule of Employer Contributions
B Summary of Main Benefit Provisions 14
C Statement of Actuarial Assumptions 19

## REPORT OF THE ANNUAL GASB STATEMENT NO. 67

## OKLAHOMA POLICE PENSION AND RETIREMENT SYSETM

## SUMMARY OF PRINCIPAL RESULTS



## INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "Financial Reporting for Pension Plans", in June 2012. Based on the provisions of GASB 67, the Oklahoma Police Pension and Retirement System (System) is a cost-sharing multiple employer plan.

This report, prepared as of June 30, 2022 (the Measurement Date), presents information to assist the Oklahoma Police Pension and Retirement System in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the System performed as of July 1, 2022 (the Valuation Date). The results of that valuation were detailed in a report dated September 7, 2022.

GASB 67 discloses the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial cost method. The Net Pension Liability (NPL) is equal to the TPL minus the System's Fiduciary Net Position (FNP) (basically the fair (market) value of assets). The plan provisions recognized in the calculation of the TPL are summarized in Appendix B.

Among the items needed for the liability calculation is the discount rate, or Single Equivalent Interest Rate (SEIR), as described by GASB 67. To determine the SEIR, the FNP must be projected, using GASB 67 guidelines, into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the members and beneficiaries of the System on the Measurement Date. 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).

Our calculations indicate 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 longterm assumed rate of return on investments. Please see our information for Paragraph 31.b.(1) for more explanation of the development of the SEIR.

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. 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 necessary calculations for the Oklahoma Police Pension and Retirement System, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information (RSI).

## SECTION I - NOTES TO FINANCIAL STATEMENTS

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30.a. (1)-(3): This information will be supplied by the System.

Paragraph 30.a. (4): The data required regarding the membership of the System was furnished by the System. The following table summarizes the membership of the System as of July 1, 2021 and July 1, 2022, the date of the valuation used to determine the June 30, 2022 TPL.

In addition to membership counts, the average expected remaining service life for all members was included. This number is not needed for GASB 67 reporting, but will need to be used as the recognition period for GASB 68 reporting.

## Membership

|  | Number as of July 1, |  |
| :--- | :---: | ---: |
|  | $\mathbf{2 0 2 2}$ |  |
|  | $\mathbf{2 0 2 1}$ |  |
| Inactive Members Or Their Beneficiaries | 4,109 | 3,950 |
| $\quad$ Currently Receiving Benefits | 132 | 132 |
| Disabled Members | 1 | 1 |
| Members in DOP | 171 | 156 |
| Inactive Members Entitled To But Not Yet | 1,113 | 1,003 |
| $\quad$ Receiving Benefits | $\underline{4,833}$ | $\underline{4,920}$ |
| Inactive Nonvested Members | 10,359 | 10,162 |
| Active Members | 5.51 | 5.69 |
| $\quad$ Total |  |  |
| Average expected remaining service |  |  |
| life for all members |  |  |

Paragraphs 30.a. (5)-(6) and Paragraphs 30.b.-f.: This information will be supplied by the System.

Paragraph 31.a. (1)-(4): As stated earlier, the NPL is equal to the TPL minus the FNP. That result, as of June 30, 2022, is presented in the following table.

| Fiscal Year Ending June 30, 2022 |  |
| :--- | ---: |
| Total Pension Liability | $\$$ |
| Fiduciary Net Position | $2,928,775,000$ |
| Net Pension Liability | $\underline{3,008,967,000}$ |
| Ratio of Fiduciary Net Position to Total | $(80,192,000)$ |
| Pension Liability | $102.74 \%$ |

Paragraph 31.b.: 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 key actuarial assumptions and other inputs:

| Price Inflation | 2.75 percent |
| :--- | :--- |
| Wage Inflation | 3.50 percent |
| Salary increases, including wage inflation | 3.50 to 12.00 percent |
| Long-term Rate of Return, net of investment <br> expense, including price inflation | 7.50 percent |
| Municipal Bond Index Rate |  |
| $\quad$Prior Measurement Date <br> $\quad$ Measurement Date | 2.13 percent |
| Year FNP is projected to be depleted | N/A percent |
| Single Equivalent Interest Rate, net of <br> investment expense, including price inflation <br> Prior Measurement Date <br> Measurement Date |  |

Pre-retirement mortality rates were based on the RP-2000 Blue Collar Healthy Combined Table (Fully generational using Scale AA) with age set back four years.

Post-retirement mortality rates were based on the RP-2000 Blue Collar Healthy Combined Table (Fully generational using Scale AA).

Disabled pensioners mortality rates were based on the Blue Collar Healthy Combined Table with age set forward four years.

The most recent experience study was performed for the period July 1, 2012 through June 30, 2017.

## Paragraph 31.b.(1)

(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 SEIR since the Prior Measurement Date.
(b) Projected cash flows: The projection of cash flows used to determine the discount rate was performed in accordance with GASB 67. We assumed that 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: $8.0 \%$ of base salary.
b. Municipality contribution rate: $13.0 \%$ of base salary.
c. State contributions: $14.7 \%$ of insurance premium tax collected for fiscal year 2023 through fiscal year 2027, and $14.0 \%$ thereafter. The dollar amount was assumed to increase with price inflation for all future years.
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.

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. 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 regular experience studies prepared for the System. The most recent experience study was performed for the period July 1, 2012 through June 30, 2017. Several factors are considered in evaluating the long-term rate of return assumption, including longterm historical data, estimates inherent in current market data, and an analysis in which bestestimate 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 may cover a shorter investment horizon and, therefore, 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) Periods of projected benefit payments: Projected future benefit payments for all current members of the System were projected through 2121.
(f) Assumed asset allocation: This will be provided by the System.
(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:

|  | $\mathbf{1 \%}$ Decrease <br> $(\mathbf{6 . 5 0 \%})$ | Current <br> Discount Rate <br> $(7.50 \%)$ | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |
| :---: | :---: | :---: | :---: |
| Total Pension Liability | $\$ 3,241,307,000$ | $\$ 2,928,775,000$ | $\$ 2,664,609,000$ |
| Fiduciary Net Position | $\underline{3,008,967,000}$ | $\underline{3,008,967,000}$ | $\underline{3,008,967,000}$ |
| Net Pension Liability | $\$ 232,340,000$ | $(\$ 80,192,000)$ | $(\$ 344,358,000)$ |

Paragraph 31.c.: The TPL at June 30, 2022 is based upon an actuarial valuation prepared as of July 1, 2022.

## SECTION II - REQUIRED SUPPLEMENTARY INFORMATION

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

Paragraphs 32.a.-c.: The required schedules are provided in Appendix A.
Paragraph 32.d.: The money-weighted rates of return will be supplied by the System.

Paragraph 34: The following information should be noted regarding the RSI, particularly for the Schedule of Employer Contributions:

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

2022 - During the fiscal year ending June 30, 2022, the share of the State's insurance premium taxes contributed to the System (shown as non-employer contributions) reverted back to its historical level of $14.0 \%$.

2021 - Historically, the System has received $14.0 \%$ of the insurance premium taxes collected. For the period beginning September 1, 2020 through June 30, 2021, the System received $9.8 \%$ of the taxes collected (shown as non-employer contributions).

2020 - A one-time benefit increase effective July 1, 2020 was granted by the 2020 Legislature.

2018 - A one-time stipend to be paid in October of 2018 was granted by the 2018 Legislature.

## Changes in actuarial assumptions:

2018 - An experience study was performed for the 2012 to 2017 period. Significant changes include:

- Price inflation was reduced from $3.00 \%$ to $2.75 \%$.
- Wage inflation was explicitly set at $3.50 \%$.
- Interest credit on DOP balances increased from $7.75 \%$ to $11.00 \%$.
- Updates to retirement rates to better fit experience.
- Updates to termination rates to better fit experience.
- Disability award amount increased from $50 \%$ of pay to $75 \%$ of pay.
- Updates to salary merit scale to better fit experience.


## Method and assumptions used in calculations of Actuarially Determined Contributions.

The System is funded with fixed contribution rates for both members and the municipality. In addition, the State contributed a fixed rate of insurance premium taxes. The Actuarially Determined Contributions in the Schedule of Employer Contributions are calculated as of the beginning of the plan year in which contributions are reported.

The following actuarial methods and assumptions were used to determine the Actuarially Determined Contribution reported in the most recent plan year, July 1, 2021 to June 30, 2022 (based on the July 1, 2021 actuarial valuation):

| Actuarial cost method | Entry age |
| :--- | :--- |
| Amortization method | Level dollar amount, open |
| Remaining amortization period | 30 years (since actuarial assets exceed liabilities) |
| Asset valuation method | 5-year smoothing |
| Price inflation | 2.75 percent |
| Salary increases, including <br> inflation | 3.50 to 12.00 percent |
| Long-term rate of return, net of <br> investment expense, including <br> price inflation | 7.50 percent |

Please see the information presented earlier in regard to Paragraph 34 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.

## APPENDIX A

## REQUIRED SUPPLEMENTARY INFORMATION

## Exhibit A

## GASB 67 Paragraph 32(a) and (b)

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY

|  | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability |  |  |  |  |  |  |  |  |
| Service cost | \$70,900,000 | \$70,743,000 | \$68,239,000 | \$64,777,000 | \$62,896,000 | \$63,029,000 | \$58,694,272 | \$54,592,585 |
| Interest | 203,502,000 | 197,839,000 | 189,926,000 | 182,961,000 | 175,092,000 | 171,306,000 | 165,076,048 | 164,140,743 |
| Benefit term changes | 0 | 0 | 43,716,000 | 0 | 2,161,000 | 0 | 0 | 0 |
| Differences between expected and actual experience | 41,476,000 | 5,727,000 | $(15,005,000)$ | 4,410,000 | $(13,155,000)$ | $(41,985,000)$ | 596,254 | $(12,764,056)$ |
| Assumption changes | 0 | 0 | 0 | 0 | 25,307,000 | 0 | 0 | 0 |
| Benefit payments, including member refunds | (197,346,000) | (200,222,000) | $(163,193,000)$ | (155,486,000) | (139,563,000) | (144,092,000) | $(138,625,000)$ | (141,693,000) |
| Net change in Total Pension Liability | \$118,532,000 | \$74,087,000 | \$123,683,000 | \$96,662,000 | \$112,738,000 | \$48,258,000 | \$85,741,574 | \$64,276,272 |
| Total Pension Liability - beginning | \$2,810,243,000 | \$2,736,156,000 | \$2,612,473,000 | \$2,515,811,000 | \$2,403,073,000 | \$2,354,815,000 | \$2,269,073,426 | \$2,204,797,154 |
| Total Pension Liability - ending (a) | \$2,928,775,000 | \$2,810,243,000 | \$2,736,156,000 | \$2,612,473,000 | \$2,515,811,000 | \$2,403,073,000 | \$2,354,815,000 | \$2,269,073,426 |
| Plan Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Employer contributions | \$46,124,000 | \$44,405,000 | \$44,226,000 | \$42,154,000 | \$40,135,000 | \$38,887,000 | \$38,533,000 | \$37,261,000 |
| Non-Employer contributions | 39,848,000 | 28,368,000 | 40,295,000 | 39,559,000 | 39,028,000 | 34,283,000 | 35,915,000 | 35,490,000 |
| Employee contributions | 29,096,000 | 27,946,000 | 27,310,000 | 26,173,000 | 24,747,000 | 23,916,000 | 23,787,000 | 22,867,000 |
| Net investment income | (196,554,000) | 770,131,000 | 55,808,000 | 104,882,000 | 205,439,000 | 242,415,000 | $(21,104,000)$ | 74,554,000 |
| Benefit payments, including member refunds | $(197,346,000)$ | $(200,222,000)$ | $(163,193,000)$ | $(155,486,000)$ | $(139,563,000)$ | $(144,092,000)$ | $(138,625,000)$ | $(141,693,000)$ |
| Administrative expenses | $(2,160,000)$ | (1,980,000) | $(1,992,000)$ | $(1,871,000)$ | $(1,721,000)$ | $(1,699,000)$ | $(1,831,000)$ | $(1,949,000)$ |
| Other changes | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ |
| Net change in Plan Fiduciary Net Position | (\$280,992,000) | \$668,648,000 | \$2,454,000 | \$55,411,000 | \$168,065,000 | \$193,710,000 | (\$63,325,000) | \$26,530,000 |
| Plan Fiduciary Net Position - beginning | \$3,289,959,000 | \$2,621,311,000 | \$2,618,857,000 | \$2,563,446,000 | \$2,395,381,000 | \$2,201,671,000 | \$2,264,996,000 | \$2,238,466,000 |
| Plan Fiduciary Net Position - ending (b) | \$3,008,967,000 | \$3,289,959,000 | \$2,621,311,000 | \$2,618,857,000 | \$2,563,446,000 | \$2,395,381,000 | \$2,201,671,000 | \$2,264,996,000 |
| Net Pension Liability - ending (a) - (b) | (\$80,192,000) | (\$479,716,000) | \$114,845,000 | (\$6,384,000) | (\$47,635,000) | \$7,692,000 | \$153,144,000 | \$4,077,426 |
| Plan Fiduciary Net Position as a percentage of the Total Pension Liability | 102.74\% | 117.07\% | 95.80\% | 100.24\% | 101.89\% | 99.68\% | 93.50\% | 99.82\% |
| Covered payroll | \$354,800,000 | \$341,577,000 | \$340,200,000 | \$324,262,000 | \$308,731,000 | \$299,131,000 | \$296,407,692 | \$295,307,065 |
| Employers' Net Pension Liability as a percentage of covered payroll | (22.60\%) | (140.44\%) | 33.76\% | (1.97\%) | (15.43\%) | 2.57\% | 51.67\% | 1.38\% |

Note: Schedule is intended to show 10-year trend. Additional years will be reported as they become available.
Results prior to 2016 were provided by the prior actuary.

## Exhibit B

GASB 67 Paragraph 32(c) SCHEDULE OF EMPLOYER CONTRIBUTIONS

|  | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined employer contribution | \$35,777,000 | \$44,682,000 | \$39,475,000 | \$36,720,000 | \$32,798,000 | \$51,417,000 | \$45,053,969 | \$63,908,114 |
| Actual employer contributions | \$46,124,000 | \$44,405,000 | \$44,226,000 | \$42,154,000 | \$40,135,000 | \$38,887,000 | \$38,533,000 | \$37,261,000 |
| Actual non-employer contributions | 39,848,000 | 28,368,000 | 40,295,000 | 39,559,000 | 39,028,000 | 34,283,000 | 35,915,000 | 35,490,000 |
| Total contributions | 85,972,000 | 72,773,000 | 84,521,000 | 81,713,000 | 79,163,000 | 73,170,000 | 74,448,000 | 72,751,000 |
| Annual contribution deficiency/(excess) | (\$50,195,000) | (\$28,091,000) | (\$45,046,000) | (\$44,993,000) | (\$46,365,000) | (\$21,753,000) | (\$29,394,031) | (\$8,842,886) |
| Covered payroll | \$354,800,000 | \$341,577,000 | \$340,200,000 | \$324,262,000 | \$308,731,000 | \$299,131,000 | \$296,407,692 | \$295,307,065 |
| Actual contributions as a percentage of covered payroll | 24.23\% | 21.31\% | 24.84\% | 25.20\% | 25.64\% | 24.46\% | 25.12\% | 24.64\% |

Note: Schedule is intended to show 10-year trend. Additional years will be reported as they become available.
Results prior to 2016 were provided by the prior actuary.

## APPENDIX B

## SUMMARY OF MAIN BENEFIT PROVISIONS

# Effective Date and Plan Year: 

## Administration:

Plan Type:
Employers Included:

## Eligibility:

## Salary Considered:

## Final Average Salary:

## Service Considered:

## State Contributions:

The System became effective July 1, 1981 and has been amended periodically since then. The plan year is July 1 to June 30.

The System is administered by the Oklahoma Police Pension Retirement Board consisting of thirteen members. The Board shall be responsible for the policies and rules for the general administration of the System.

Defined benefit plan.
An eligible employer may join the System on the first day of any month. An application of affiliation must be filed in the form of a resolution before the eligible municipality can become a participating municipality.

All persons employed full-time as officers working more than 25 hours per week or any person undergoing police training to become a permanent police officer with a police department of a participating municipality, with ages not less than twenty-one (21) nor more than forty-five (45) when accepting membership.

Base salary used in the determination of benefits does not include payment for accumulated sick and annual leave upon termination of employment or any uniform allowances.

Final average salary means the average paid base salary for normally scheduled hours of an officer over the highest 30 consecutive months of the last 60 months of credited service.

Credited service consists of the period during which the member participated in the System or predecessor municipal pay as an active employee, plus any service prior to the establishment of the municipal plan which was credited under the predecessor municipal systems of credited service granted by the State Board, plus any applicable military service.

Insurance premium tax allocation. Historically, the System has received $14 \%$ of these collected taxes. For FY 2005 through FY 2009, the System received $17 \%$ of these collected taxes. For the period beginning July 1, 2009 and ending August 31, 2020, the System received $14 \%$ of these collected taxes. For the period beginning September 1, 2020 through June 30, 2021, the System received $9.8 \%$ of these collected taxes. For FY 2022, the System received 14\% of these collected taxes. For FY 2023 through FY 2027, $14.7 \%$ of the taxes collected will be allocated to the

System. For the following fiscal years, $14 \%$ of the taxes collected will be allocated to the System.

Beginning in FY 2006, the System began receiving 26\% of a special allocation established to refund the System for reduced allocations of insurance premium taxes resulting from increases in insurance premium tax credits. For the period beginning September 1, 2020 through June 30, 2021, the System received $18.2 \%$ of the insurance premium tax allocation. For FY 2022 and thereafter, the System will receive $26 \%$ of the insurance premium tax allocation. Beginning in fiscal year July, 1 2010, the amount of insurance premium tax apportioned to the System will be applied prior to the calculation of the Home Office Credit.

In addition to these allocations, the System will receive $\$ 16,250$ annually for FY 2023 through FY 2027.

## Member Contributions:

## Municipality Contributions:

Normal Retirement Benefit:
Normal Retirement Eligibility:
Benefit Amount:

Normal Form of Benefit:
$8 \%$ of paid salary. These contributions shall "be picked up" after December 31, 1988 pursuant to Section 414(h)(2) of the Internal Revenue Code.

Contribution is $13 \%$ of paid salary as of July 1, 1996.

20 years of credited service.
$21 / 2 \%$ of the final average salary multiplied by the years of credited service, with a maximum of 30 years of credited service considered.

The benefit is paid as a Joint and $100 \%$ Survivor Annuity if the member was married 30 months prior to death.

## Termination Benefit:

Less than 10 Years of Service: Refund of member 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 later of the date the member would have had 20 years of service and the date the member reaches age 50 . The benefit amount is equal to $21 / 2 \%$ of the greater of (i) final average salary or (ii) the salary paid to active employees as described under "salary considered" multiplied by the years and completed months of credited service.

## Disability Benefit (Duty):

## Disability Benefit (NonDuty):

## Total Disability

Upon determination of disability incurred as a result of the performance of duty, the normal disability benefit is $50 \%$ of final average salary.

## $\underline{\text { Partial Disability }}$

Upon determination of partial disability incurred as a result of the performance of duty, the normal disability is reduced according to the percentage of impairment, as outlined in the "American Medical Association's Guide to the Evaluation of Permanent Impairment." The following shows the percent of normal disability benefit payable as related to the percent of impairment.

| \% Impairment | \% of Benefit |
| :---: | :---: |
| $1 \%$ to $49 \%$ | $50 \%$ |
| $50 \%$ to $74 \%$ | $75 \%$ |
| $75 \%$ to $100 \%$ | $100 \%$ |

Upon determination of disability after 10 years of service due to causes other than duty, the benefit equals the accrued benefit of $21 / 2 \%$ of final average salary times years of credited service (maximum of 30 years) times:

- $100 \%$, if permanent and total, or
- The following percentages, if partial disability.

| \% Impairment | \% of Benefit |
| :---: | :---: |
| $1 \%$ to $24 \%$ | $25 \%$ |
| $25 \%$ to $49 \%$ | $50 \%$ |
| $50 \%$ to $74 \%$ | $75 \%$ |
| $75 \%$ to $99 \%$ | $90 \%$ |

Upon determination of disability with less than 10 years of service due to causes other than duty, a refund of member contributions without interest will be paid.

## Death Benefits Payable to Beneficiaries:

Prior to Retirement (Duty):

Prior to Retirement (Non-Duty):

After Retirement:

Lump Sum:
Beneficiary:

The greater of:

1) $2 \frac{1}{2} \%$ of final average salary times years of credited service (maximum of 30 years), or
2) $50 \%$ of final average salary.

After 10 years of service, a benefit equal to $21 / 2 \%$ of final average salary times years of credited service (maximum if 30 years).

Prior to 10 years of service, a refund of the accumulated contributions made by the member will be paid to the estate.
$100 \%$ of the member's retirement or deferred vested benefit, payable when the member would have been eligible to receive it, payable to the beneficiary.

The beneficiary shall receive a lump-sum amount of $\$ 5,000$.
Surviving spouses must be married to the member 30 months prior to the date of death (waived in the case of duty related death).

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.

Police officers eligible to receive increased benefits according to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of $1 / 3$ to $1 / 2$ of the increase or decrease of any adjustment to the base salary of a regular police officer.

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 DOP, 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-dop-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. Inflation
2. Investment Return
3. Salary Scale
$2.75 \%$, per annum, compound annually.
$7.50 \%$, net of investment expenses, per annum, compound annually.

| Attained <br> Service | Inflation <br> $\mathbf{\%}$ | Merit <br> $\mathbf{\%}$ | Increase <br> $\mathbf{\%}$ |
| :---: | :---: | :---: | :---: |
| 0 | 3.50 | 8.50 | 12.00 |
| 1 | 3.50 | 6.50 | 10.00 |
| 2 | 3.50 | 5.50 | 9.00 |
| 3 | 3.50 | 4.50 | 8.00 |
| $4-6$ | 3.50 | 4.00 | 7.50 |
| 7 | 3.50 | 3.75 | 7.25 |
| 8 | 3.50 | 3.50 | 7.00 |
| 9 | 3.50 | 3.25 | 6.75 |
| $10-12$ | 3.50 | 3.00 | 6.50 |
| 13 | 3.50 | 2.00 | 5.50 |
| 14 | 3.50 | 1.25 | 4.75 |
| 15 | 3.50 | 0.75 | 4.25 |
| $16-25$ | 3.50 | 0.25 | 3.75 |
| $26+$ | 3.50 | 0.00 | 3.50 |

Demographic Assumptions

1. Retirement Rates

| Attained <br> Service | Annual Rates <br> of Retirement |
| :---: | :---: |
| 20 | $15 \%$ |
| 21 | 8 |
| 22 | 8 |
| 23 | 8 |
| 24 | 8 |
| 25 | 20 |
| 26 | 10 |
| 27 | 10 |
| 28 | 10 |
| 29 | 15 |
| 30 | 20 |
| 31 | 30 |
| 32 | 40 |
| 33 | 50 |
| 34 | 75 |
| 35 | 100 |

## 2. Mortality Rates

(a) Active participants
(b) Active participants (postretirement) and nondisabled pensioners
(c) Disabled pensioners
3. Disability Rates
4. Withdrawal Rates

RP-2000 Combined Blue Collar Healthy Employees (generational using Scale AA) with age set back four years

RP-2000 Combined Blue Collar Healthy Employees (generational using Scale AA)

RP-2000 Combined Blue Collar Healthy Employees with age set forward four years (no generational improvement)

Sample rates are shown below:

| Age | Rate |
| :---: | :--- |
| $20-24$ | $0.02 \%$ |
| $25-29$ | 0.02 |
| $30-34$ | 0.04 |
| $35-39$ | 0.06 |
| $40-44$ | 0.08 |
| $45-49$ | 0.10 |
| $50-54$ | 0.12 |
| Over 55 | 0.14 |

No disabilities are assumed after a member attains retirement eligibility. $100 \%$ of disabilities are assumed to be duty-related.

Sample rates are shown below:

| Service Range | Rate |
| :---: | :---: |
| 0 | $15.0 \%$ |
| 1 | 12.0 |
| 2 | 10.0 |
| 3 | 8.0 |
| 4 | 7.0 |
| 5 | 6.0 |
| 6 | 5.0 |
| 7 | 4.5 |
| 8 | 4.0 |
| 9 | 3.5 |
| 10 | 3.0 |
| 11 | 2.5 |
| 12 | 2.0 |
| 13 | 1.5 |
| $14-20$ | 1.0 |
| Over 20 | 0.0 |

(a) Percentage married:
(b) Age difference:

Males: 85\%; Females: 85\%

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

## Other Assumptions:

1. Deferred Benefits Begin at:
2. Provision for Expenses:
3. Percentage of Disability:
4. Duty-Related Death:
5. Cost-of-Living Allowance:
6. Deferred Option Plan:

Age 50, or the date at which the participant would have achieved 20 years of service, if later.

Administrative Expenses, as budgeted by the Oklahoma Police Pension and Retirement System.

Members becoming disabled have a 50\%-74\% impairment.

All pre-retirement deaths are duty-related.
Police officers eligible to receive increased benefits according to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of $1 / 3$ to $1 / 2$ of the increase or decrease of any adjustment to the base salary of a regular police officer, based on an increase in base salary of $3.5 \%$ (wage inflation).

Members currently participating in the Deferred Option Plan (DOP) are assumed to remain in the DOP for the maximum of five years. Active members leaving active service are assumed to retroactively elect to join the DOP for the maximum allowable period. DOP account balances are assumed to accumulate at $11 \%$ (to reflect the interest rate guarantee prior to retirement) for future BackDOP elections and members are assumed to elect a lump sum at retirement. All balances held in Deferred Option payout accounts are assumed to be paid immediately upon the end of employment.

