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GASB STATEMENT NO. 67 REPORT

FOR THE OKLAHOMA LAW ENFORCEMENT

RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2021

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October 12, 2021

Board of Trustees
Oklahoma Law Enforcement Retirement Systems
421 NW 13th 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 meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67 for the June 30, 2021 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 performed as of July 1, 2021 was used as the basis for much of the information presented as of June 30, 2021 in this report. 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 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 appropriate actuarial models that were developed for this purpose. These models use 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.

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 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, 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,

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

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67

OKLAHOMA LAW ENFORCEMENT RETIREMENT SYSTEM

SUMMARY OF PRINCIPAL RESULTS

Valuation Date (VD):	July 1, 2021
Prior Measurement Date:	June 30, 2020
Measurement Date (MD):	June 30, 2021
Membership Data:	
Retirees and Beneficiaries	1,562
Inactive Vested Members	28
Inactive Nonvested Members	9
Active Employees	1,190
Total	2,789
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.50%
Municipal Bond Index Rate at Prior Measurement Date	2.19%
Municipal Bond Index Rate at Measurement Date	2.13%
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%
Net Pension Liability:	
Total Pension Liability (TPL)	$1,258,688,464
Fiduciary Net Position (FNP)	1,245,241,476
Net Pension Liability (NPL = TPL – FNP)	$13,446,988
FNP as a percentage of TPL	98.93%

INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), *"Financial Reporting for Pension Plans"*, in June 2012. The effective date for reporting under GASB 67 for the Oklahoma Law Enforcement Retirement System was fiscal year end June 30, 2014. Based on the provisions of GASB 67, the Oklahoma Law Enforcement Retirement System is a single employer defined benefit pension plan.

This report, prepared as of June 30, 2021 (the Measurement Date), presents information to assist the Oklahoma Law Enforcement 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, 2021 (the Valuation Date). The results of that valuation were detailed in a report dated October 8, 2021.

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 benefit 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) (2.13%).

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, 2020 or the June 30, 2021 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. Please see Paragraph 31.b.(1) for more explanation of the development of the SEIR.

The FNP projections are based upon the Oklahoma Law Enforcement Retirement 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, 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 were furnished by the System. The following table summarizes the membership of the System as of July 1, 2021, the date of the valuation used to determine the June 30, 2021 Total Pension Liability.

Membership

Number as of July 1, 2021	
Inactive Members Or Their Beneficiaries Currently Receiving Benefits	1,562
Inactive Members Entitled To But Not Yet Receiving Benefits	28
Nonvested Terminations	9
Active Members	1,190
Total	2,789

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, 2021, is presented in the following table.

Fiscal Year Ending June 30, 2021		
Total Pension Liability	$	1,258,688,464
Fiduciary Net Position		1,245,241,476
Net Pension Liability	$	13,446,988
Ratio of Fiduciary Net Position to Total Pension Liability		98.93%

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, 2021 was determined based on an actuarial valuation prepared as of July 1, 2021, using the following actuarial assumptions and other inputs:

Price Inflation	2.75 percent
Salary increases, including price inflation	3.50 to 9.75 percent
Long-term Rate of Return, net of investment expense, including price inflation	7.50 percent
Municipal Bond Index Rate	
Prior Measurement Date	2.19 percent
Measurement Date	2.13 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 RP-2014 Blue Collar Healthy Table with Generational Projection using Scale MP-2016. Post-retirement mortality rates were based on the same table as pre-retirement mortality. Disability mortality rates were based on the RP-2014 Blue Collar Table with no projection from 2006 base rates.

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, 2016. The experience study report is dated May 10, 2017.

Paragraph 31.b.(1)

(a) **Discount rate (SEIR):** The discount rate used to measure the TPL at June 30, 2021 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. 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 2.13% on the Measurement Date.

(e) **Periods 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	10%	2.77%
Multi-Sector	10%	3.65%
Global Bonds	10%	2.54%
U.S. Large Cap Equity	20%	7.48%
U.S. Small Cap Equity	10%	8.71%
International Developed Equity	10%	8.45%
Emerging Market Equity	5%	9.72%
Long/Short Equity	10%	7.23%
Private Equity	5%	10.20%
Core Real Estate	7%	5.88%
Commodities	3%	2.10%
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:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Total Pension Liability	$1,407,592,468	$1,258,688,464	$1,136,336,579
Plan Fiduciary Net Position	1,245,241,476	1,245,241,476	1,245,241,476
Net Pension Liability	$162,350,992	$13,446,988	($108,904,897)

Paragraph 31.c.: The TPL at June 30, 2021 is based upon an actuarial valuation prepared as of July 1, 2021.

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 tables of 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 to the plan provisions were made by the Oklahoma Legislature and reflected in the valuation performed as of July 1 listed below:

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 had been retired for five years as of October 1, 2018. The stipend amount was based on the funding level of the system. OLERS members receives 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.

2012: Senate Bill No. 1001 was enacted, which increased the agency contribution to 11% of pay as of November 1, 2012. In addition, the bill eliminated the half-pay benefit for certain members hired on or after November 1, 2012.

Changes in actuarial assumptions and methods:

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.

7/1/2012 valuation:

- Healthy mortality was changed from the RP-2000 Table with Blue Collar adjustment (Active rates before age 50, Annuitant rates after age 49) with generational mortality improvement to the RP-2000 Combined Table with Blue Collar adjustment with generational mortality improvement.
- Post-disability mortality was changed from RP-2000 Table with Blue Collar Adjustment set forward seven years to RP-2000 Combined Table with Blue Collar adjustment.
- The retirement, disability, and withdrawal rates were changed.
- The inflation assumption was changed from 3.25% to 3.00%.
- The salary increase assumption was changed.

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 drivers 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, 2020 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for Fiscal Year End 2021 in that schedule:

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Remaining amortization period	9 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% for those eligible

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*.

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

APPENDIX A

REQUIRED
SUPPLEMENTARY INFORMATION

Exhibit A

GASB 67 Paragraph 32.a.
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total Pension Liability										
Service Cost	$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	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 changes	0	5,382,346	0	832,135	0	0	0	0		
Difference between expected										
and actual experience	(12,332)	10,418,879	13,872,884	(5,996,493)	(2,306,866)	6,137,500	51,089,996	(9,770,969)		
Changes of assumptions	0	0	0	0	1,106,642	0	0	0		
Benefit payments	(70,385,680)	(63,802,120)	(59,666,140)	(58,214,428)	(56,857,644)	(57,413,343)	(56,492,087)	(48,958,959)		
Refunds of contributions	(1,429,357)	(839,132)	(981,343)	(833,956)	(754,647)	(934,541)	(696,185)	(817,682)		
Net change in Total Pension Liability	$38,981,031	$57,818,863	$56,138,612	$36,463,442	$39,937,465	$43,681,951	$82,602,507	$25,704,905		
Total Pension Liability - beginning*	$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		
Total Pension Liability - ending (a)	$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		
Plan Fiduciary Net Position										
Contributions – employer	$9,877,785	$9,503,466	$8,921,728	$9,082,750	$9,262,357	$10,219,356	$9,438,391	$8,566,411		
Contributions – non-employer	20,767,474	24,382,470	24,040,441	23,673,616	21,842,260	22,980,649	22,861,107	21,164,877		
Contributions – member	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	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	(70,385,680)	(63,802,120)	(59,666,140)	(58,214,428)	(56,857,644)	(57,413,343)	(56,492,087)	(48,958,959)		
Administrative expense	(1,431,482)	(1,478,750)	(1,130,411)	(1,091,870)	(1,082,669)	(1,031,334)	(1,069,278)	(926,612)		
Refunds of contributions	(1,429,357)	(839,132)	(981,343)	(833,956)	(754,647)	(934,541)	(696,185)	(817,682)		
Other	0	0	0	0	0	0	0	0		
Net change in Plan Fiduciary Net Position	$241,579,278	($12,983,526)	$18,013,102	$59,288,006	$85,760,979	($41,557,080)	$15,234,221	$106,216,930		
Plan Fiduciary Net Position – beginning*	$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		
Plan Fiduciary Net Position - ending (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		
Net Pension Liability - ending (a) - (b)	$13,446,988	$216,045,235	$145,242,846	$107,117,336	$129,941,900	$188,960,685	$103,721,654	$36,353,368		

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

Exhibit A (Continued)

GASB 67 Paragraph 32.b.
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total Pension Liability	$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		
Plan Fiduciary Net Position	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		
Net Pension Liability	$13,446,988	$216,045,235	$145,242,846	$107,117,336	$129,941,900	$188,960,685	$103,721,654	$36,353,368		
Ratio of Plan Fiduciary Net Position to Total Pension Liability	98.93%	82.29%	87.50%	90.31%	87.85%	81.88%	89.62%	96.03%		
Covered payroll	$85,003,741	$87,673,889	$85,407,024	$86,121,195	$86,495,680	$88,682,733	$84,879,915	$76,838,068		
Net Pension Liability as a percentage of covered payroll	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 was the first year to exclude the Medical Supplement.

Exhibit B

GASB 67 Paragraph 32.c.
SCHEDULE OF EMPLOYER CONTRIBUTIONS
($ in Thousands)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially determined employer contribution	$37,289	$34,527	$31,265	$32,467	$33,110	$33,291	$31,838	$43,775	$44,734	$48,634
Actual employer contributions	30,645	33,886	32,962	32,756	31,105	33,200	32,299	29,731	28,103	26,250
Annual contribution deficiency (excess)	$6,643	$641	($1,697)	($289)	$2,006	$91	($461)	$14,044	$16,631	$22,384
Covered payroll	$85,004	$87,674	$85,407	$86,121	$86,496	$88,683	$84,880	$76,838	$73,423	$71,598
Actual contributions as a percentage of covered payroll	36.05%	38.65%	38.59%	38.04%	35.96%	37.44%	38.05%	38.69%	38.28%	36.66%

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 (OBNDD), 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 OBNDD 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.

<u>Effective July 1, 2002</u>:

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	6.25	9.75
5	3.50	3.25	6.75
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	0.10
26	0.10
27	0.10
28	0.20
29	0.20
30	0.30
31	0.40
32	0.50
33	0.60
34	0.80
Over 34	1.00

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

2. Mortality Rates

(a) Active participants

RP-2014 Blue Collar Healthy Employees with Generational Projection (MP-2016)

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

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

RP-2014 Blue Collar Healthy Annuitants with Generational Projection (MP-2016)

(c) Disabled pensioners

RP-2014 Blue Collar Healthy Annuitants (no projection form 2006 base rates)

3. Disability Rates

Sample rates are shown below:

Age	Rate
20	0.0002
30	0.0005
40	0.0016
50	0.0060
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	0.1500
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.

<u>Other Assumptions:</u>

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: All active and terminated vested 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: Deferred Option Plan (DOP) members are assumed to remain in the DOP for the maximum of five years prior to electing a lump sum.

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 56% of active members who retire elect to retroactively enter into the DOP for five years, 30% elect to enter the DOP, and 14% elect to begin an 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.