



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve

GASB STATEMENT NO. 68 REPORT

FOR THE STATE OF OKLAHOMA

UNIFORM RETIREMENT SYSTEM FOR

JUSTICES & JUDGES

PREPARED AS OF JUNE 30, 2019





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

November 20, 2019

Mr. Joseph Fox
Executive Director
Oklahoma Public Employees Retirement System
5400 N. Grand Boulevard, Suite 400
Oklahoma City, OK 73112

Dear Mr. Fox:

Presented in this report is information to assist the Uniform Retirement System for Justices and Judges 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, 2019. 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, 2019. The valuation was based upon data, furnished by the Uniform Retirement System for Justices and Judges' 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. 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.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

www.CavMacConsulting.com

Offices in Kennesaw, GA • Bellevue, NE



Mr. Joseph Fox
November 20, 2019
Page 2

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, appearing to read 'Alisa Bennett'.

Alisa Bennett, FSA, EA, FCA, MAAA
President

A handwritten signature in blue ink, appearing to read 'Brent A. Banister'.

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



TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Introduction	2
III	Pension Expense (Income)	4
IV	Notes to Financial Statements	6
V	Required Supplementary Information	15
 <u>Appendix</u>		
A	Required Supplementary Information Tables Exhibit A – Schedule of Changes in the Net Pension Liability/(Asset) Exhibit B – Schedule of Employer Contributions	17
B	Summary of Main Benefit Provisions	19
C	Statement of Actuarial Assumptions	23



GASB STATEMENT NO. 68

UNIFORM RETIREMENT SYSTEM FOR JUSTICES AND JUDGES

SECTION I - SUMMARY OF PRINCIPAL RESULTS

Uniform Retirement System for Justices and Judges	
Valuation Date (VD):	July 1, 2019
Prior Measurement Date:	June 30, 2018
Measurement Date (MD):	June 30, 2019
Membership Data:	
Retirees and Beneficiaries	300
Inactive Vested Members	18
Inactive Nonvested Members	17
Active Employees	<u>269</u>
Total	604
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.00%
Municipal Bond Index Rate at Prior Measurement Date	3.89%
Municipal Bond Index Rate at Measurement Date	3.50%
Year in which Fiduciary Net Position is Projected to be Depleted	N/A
Single Equivalent Interest Rate at Prior Measurement Date	7.00%
Single Equivalent Interest Rate at Measurement Date	7.00%
Net Pension Liability:	
Total Pension Liability (TPL)	\$305,801,494
Fiduciary Net Position (FNP)	<u>344,205,778</u>
Net Pension Liability (NPL = TPL – FNP)	(\$38,404,284)
FNP as a percentage of TPL	112.56%
Pension Expense:	\$6,717,770
Deferred Outflows of Resources:	\$13,151,719
Deferred Inflows of Resources:	\$11,619,675



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, 2019 (the Measurement Date), presents information to assist the Uniform Retirement System for Justices and Judges in providing the required information under GASB 68 to participating employers. Much of the material provided in this report, including the Net Pension Liability/(Asset), is based on the results of the GASB 67 report for the Uniform Retirement System for Justices and Judges, which was issued November 20, 2019. 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/(Asset) (NPL) on the plan sponsor’s balance sheet and a determination of a Pension Expense (Income) (PE), which may bear little relationship to the funding requirements for the Uniform Retirement System for Justices and Judges. 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) (3.50%).

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, 2018 or the June 30, 2019 TPL. The SEIR for both the Measurement Date and the Prior Measurement Date is 7.00%, 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 Uniform Retirement System for Justices and Judges' 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 (INCOME)

As noted earlier, the collective Pension Expense (Income) (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, 2019, there were no benefit changes to be recognized.

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 8.84. 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 4.11 years.

The last item under changes in TPL is changes in actuarial assumptions or other inputs. There were no changes in the actuarial assumptions or other inputs since the Prior Measurement Date. If there was such a change, the change would 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 PE for the year ended June 30, 2019 is shown in the following table.



Pension Expense (Income)
For the Year Ended June 30, 2019

Uniform Retirement System for Justices and Judges	2019
Service Cost	\$9,003,153
Interest on the Total Pension Liability	19,622,906
Current-period Benefit Changes	0
Expensed portion of current-period difference between expected and actual experience in the total pension liability	1,763,021
Expensed portion of current-period changes of assumptions	0
Member Contributions	(2,666,542)
Projected Earnings on Plan Investments	(23,070,955)
Expensed portion of current-period differences between actual and projected earnings on plan investments	591,175
Administrative Expense	168,571
Other	0
Recognition of beginning deferred outflows of resources as pension expense	9,414,588
Recognition of beginning deferred inflows of resources as pension expense	(8,108,147)
Total Pension Expense	\$6,717,770

Note: Average expected remaining service life for all members is 4.11.



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, 2019, the date of the valuation used to determine the June 30, 2019 Total Pension Liability.

Membership

Number as of July 1, 2019	
Inactive Members Or Their Beneficiaries	300
Currently Receiving Benefits	
Inactive Members Entitled To But Not Yet	18
Receiving Benefits	
Nonvested Terminations	17
Active Members	269
Total	604

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



Paragraph 42:

(a): Discount rate (SEIR). The discount rate used to measure the TPL at June 30, 2019 was 7.00 percent. 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 and the State of Oklahoma will be made at the current contribution rates as set out in state statute:

- a. Employee contribution rate: 8.00%
- b. State contribution rate: 22.00%
- c. 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.
- d. 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 7.00% 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 3.50% 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 used in the June 30, 2016 experience study, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
US Large Cap Equity	38.0%	3.8%
US Small Cap Equity	6.0%	4.9%
Non-US Equity	24.0%	9.2%
US Fixed	<u>32.0%</u>	1.4%
Total	100.0%	

*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 7.00 percent, as well as the System's NPL calculated using a discount rate that is 1-percentage-point lower (6.00 percent) or 1-percentage-point higher (8.00 percent) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Total Pension Liability	\$333,653,450	\$305,801,494	\$281,609,176
Fiduciary Net Position	<u>344,205,778</u>	<u>344,205,778</u>	<u>344,205,778</u>
Net Pension Liability/(Asset)	(\$10,552,328)	(\$38,404,284)	(\$62,596,602)

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



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

Uniform Retirement System for Justices and Judges			
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2018	\$290,379,164	\$334,896,669	(\$44,517,505)
Changes for the year:			
Service cost	9,003,153		9,003,153
Interest	19,622,906		19,622,906
Benefit changes	0		0
Difference between expected and actual experience	7,246,015		7,246,015
Changes in assumptions	0		0
Contributions - employer		7,145,803	(7,145,803)
Contributions - non-employer		0	0
Contributions - member		2,666,542	(2,666,542)
Net investment income		20,115,079	(20,115,079)
Benefit payments, including refunds of employee contributions	(20,449,744)	(20,449,744)	0
Administrative expense		(168,571)	168,571
Other changes		0	0
Net changes	<u>15,422,330</u>	<u>9,309,109</u>	<u>6,113,221</u>
Balances at June 30, 2019	\$305,801,494	\$344,205,778	(\$38,404,284)



Paragraph 45:

(a): The Measurement Date of the collective NPL is June 30, 2019. The TPL as of June 30, 2019 was determined based on the annual actuarial funding valuation report prepared as of July 1, 2019.

(b): There is no special funding situation.

(c): There was no change in the actuarial assumptions or other inputs that affected the measurement of the TPL since the Prior Measurement Date.

(d): There was no change in the benefit terms that affected measurement of the TPL since the Prior Measurement Date.

(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 System 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, 2019). 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.

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows/(Inflows) of Resources
Differences between expected and actual experience	\$5,482,994	\$2,863,396	\$2,619,598
Changes of assumptions	1,139,258	0	1,139,258
Differences between projected and actual earnings	<u>6,529,467</u>	<u>8,756,279</u>	<u>(2,226,812)</u>
Total	\$13,151,719	\$11,619,675	\$1,532,044



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

Uniform Retirement System for Justices and Judges - Deferred Outflows of Resources								
	June 30, 2018		Additions		Recognition	June 30, 2019		
Differences between expected and actual experience								
FY 2015 Base	\$	0	\$	0	\$	0	\$	0
FY 2016 Base		0		0		0		0
FY 2017 Base		0		0		0		0
FY 2018 Base		0		0		0		0
FY 2019 Base		0		7,246,015		1,763,021		5,482,994
Total	\$	0	\$	7,246,015	\$	1,763,021	\$	5,482,994
Changes of assumptions								
FY 2015 Base	\$	0	\$	0	\$	0	\$	0
FY 2016 Base		1,608,995		0		1,411,399		197,596
FY 2017 Base		1,954,200		0		1,012,538		941,662
FY 2018 Base		0		0		0		0
FY 2019 Base		0		0		0		0
Total	\$	3,563,195	\$	0	\$	2,423,937	\$	1,139,258
Differences between projected and actual earnings								
FY 2015 Base	\$	2,825,885	\$	0	\$	2,825,885	\$	0
FY 2016 Base		8,329,532		0		4,164,766		4,164,766
FY 2017 Base		0		0		0		0
FY 2018 Base		0		0		0		0
FY 2019 Base		0		2,955,876		591,175		2,364,701
Total	\$	11,155,417	\$	2,955,876	\$	7,581,826	\$	6,529,467
Total	\$	14,718,612	\$	10,201,891	\$	11,768,784	\$	13,151,719



Uniform Retirement System for Justices and Judges - Deferred Inflows of Resources				
	June 30, 2018	Additions	Recognition	June 30, 2019
Differences between expected and actual experience				
FY 2015 Base	\$ 166,208	\$ 0	\$ 166,208	\$ 0
FY 2016 Base	2,059,749	0	1,806,799	252,950
FY 2017 Base	3,272,800	0	1,695,751	1,577,049
FY 2018 Base	1,518,559	0	485,162	1,033,397
FY 2019 Base	0	0	0	0
Total	\$ 7,017,316	\$ 0	\$ 4,153,920	\$ 2,863,396
Changes of assumptions				
FY 2015 Base	\$ 0	\$ 0	\$ 0	\$ 0
FY 2016 Base	0	0	0	0
FY 2017 Base	0	0	0	0
FY 2018 Base	0	0	0	0
FY 2019 Base	0	0	0	0
Total	\$ 0	\$ 0	\$ 0	\$ 0
Differences between projected and actual earnings				
FY 2015 Base	\$ 0	\$ 0	\$ 0	\$ 0
FY 2016 Base	0	0	0	0
FY 2017 Base	9,319,217	0	3,106,405	6,212,812
FY 2018 Base	3,391,289	0	847,822	2,543,467
FY 2019 Base	0	0	0	0
Total	\$ 12,710,506	\$ 0	\$ 3,954,227	\$ 8,756,279
Total	\$ 19,727,822	\$ 0	\$ 8,108,147	\$ 11,619,675

(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:

Year Ended June 30:	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows/(Inflows) of Resources
2020	\$7,658,220	\$6,269,388	\$1,388,832
2021	2,354,196	4,439,391	(2,085,195)
2022	2,354,196	910,896	1,443,300
2023	785,107	0	785,107
2024	0	0	0
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:

2018: House Bill 1340, enacted in 2018, provides a stipend for members of each system who have been retired for five years as of October 1, 2018. The stipend amount is based on the funding level of the system. OPERS members will receive the lesser of 2% of the gross annual retirement amount or \$1,400. The bill also provides a minimum payment of \$350 for members with 20 years of service. The effective date of the stipend is October 1, 2018.

2011: Under House Bill 2132, COLAs are removed from the definition of “non-fiscal retirement bills” in the Oklahoma Pension Legislation Actuarial Analysis Act (“OPLAAA”). The effect of these amendments makes any COLA bill subject to all of the requirements of OPLAAA including the requirement that such bills provide adequate funding to pay the cost.

Under HB1010, the retirement age for judges taking office on or after January 1, 2012 increases from the current age 65 to age 67 with eight years of service. In addition, the current Rule of 80 or age 60 changes to age 62 with 10 or more years of service.

SB782 amends 62 O.S. § 3109 to move the deadline for completion of an actuarial investigation from November 1 to December 1. The final bill deletes the requirement that the state pension systems submit reports annually to the Pension Commission using standard actuarial assumptions.

Changes in actuarial assumptions:

7/1/2017 valuation:

- Decrease the investment return from 7.25% to 7.00%.
- Decrease the price inflation from 3.00% to 2.75%.
- Decrease the real wage growth from 1.00% to 0.75%.
- Change mortality assumption to reflect recent mortality improvements.
- Salary scale assumption was decreased from 5.00% to 3.75%
- Retirement rates were revised.



7/1/2016 valuation:

- Decrease the investment return from 7.50% to 7.25%.

7/1/2014 valuation:

- Salary scale assumption was decreased.
- Retirement rates were adjusted.

7/1/2011 valuation:

- Salary increase assumption was revised.
- Payroll increase assumption was revised.

Method and assumptions used in calculations of actuarially determined contributions.

The System is funded with fixed contribution rates for the employees and the state. 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, 2018 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for Fiscal Year End 2019 in that schedule:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	9 years
Asset valuation method	5-year smoothed market
Price Inflation	2.75 percent
Salary increase, including price inflation	3.75 percent
Long-term Rate of Return, net of investment expense, including price inflation	7.00 percent

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 (ASSET)

Fiscal Year Ended June 30

Uniform Retirement System for Justices and Judges	2019	2018	2017	2016	2015	2014
Total Pension Liability						
Service Cost	\$9,003,153	\$8,896,931	\$10,085,219	\$9,689,307	\$9,602,685	\$9,489,204
Interest	19,622,906	19,161,620	19,229,316	19,340,785	18,812,397	18,528,474
Benefit term changes	0	0	0	0	0	0
Differences between expected and actual experience	7,246,015	(2,003,721)	(6,664,302)	(7,480,146)	(4,598,372)	(7,596,999)
Assumption changes	0	0	3,979,276	5,843,192	0	(1,045,574)
Benefit payments, including member refunds	(20,449,744)	(18,513,078)	(17,737,736)	(17,359,623)	(16,204,361)	(14,996,391)
Net change in Total Pension Liability	\$15,422,330	\$7,541,752	\$8,891,773	\$10,033,515	\$7,612,349	\$4,378,714
Total Pension Liability - beginning *	\$290,379,164	\$282,837,412	\$273,945,639	\$266,400,026	\$258,787,677	\$254,408,963
Total Pension Liability - ending (a)	\$305,801,494	\$290,379,164	\$282,837,412	\$276,433,541	\$266,400,026	\$258,787,677
Plan Fiduciary Net Position						
Employer contributions	\$7,145,803	\$6,504,275	\$6,013,196	\$5,831,884	\$5,295,012	\$4,610,812
Non-employer contributions - Direct Aid (State/City/District)	0	0	0	0	0	0
Employee contributions	2,666,542	2,608,284	2,663,717	2,666,001	2,706,406	2,543,885
Net investment income	20,115,079	26,188,737	36,313,215	1,441,579	8,173,421	46,212,132
Benefit payments, including member refunds	(20,449,744)	(18,513,078)	(17,737,736)	(17,359,623)	(16,204,361)	(14,996,391)
Administrative expenses	(168,571)	(154,194)	(153,267)	(149,149)	(143,582)	(132,190)
Other	0	0	0	0	0	0
Net change in Plan Fiduciary Net Position	\$9,309,109	\$16,634,024	\$27,099,125	(\$7,569,308)	(\$173,104)	\$38,238,248
Plan Fiduciary Net Position – beginning*	\$334,896,669	\$318,262,645	\$291,163,520	\$301,296,105	\$301,469,209	\$263,230,961
Plan Fiduciary Net Position - ending (b)	\$344,205,778	\$334,896,669	\$318,262,645	\$293,726,797	\$301,296,105	\$301,469,209
Net Pension Liability/(Asset) - ending (a) - (b)	(\$38,404,284)	(\$44,517,505)	(\$35,425,233)	(\$17,293,256)	(\$34,896,079)	(\$42,681,532)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	112.56%	115.33%	112.52%	106.26%	113.10%	116.49%
Covered payroll	\$33,838,528	\$33,359,101	\$34,810,851	\$34,537,376	\$34,281,695	\$34,325,368
Employers' Net Pension Liability/(Asset) as a percentage of covered payroll	(113.49%)	(133.45%)	(101.76%)	(50.07%)	(101.79%)	(124.34%)

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

Uniform Retirement System for Justices and Judges	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined employer contribution	\$351,780	\$1,637,632	\$3,626,394	\$3,454,220	\$4,897,263	\$7,215,004	\$7,385,495	\$7,412,732	\$12,518,554	\$10,778,833
Actual employer contributions	<u>7,145,803</u>	<u>6,504,275</u>	<u>6,013,196</u>	<u>5,831,884</u>	<u>5,295,012</u>	<u>4,610,812</u>	<u>4,129,300</u>	<u>3,619,677</u>	<u>3,193,277</u>	<u>8,704,232</u>
Annual contribution deficiency (excess)	<u>(\$6,794,023)</u>	<u>(\$4,866,643)</u>	<u>(\$2,386,802)</u>	<u>(\$2,377,664)</u>	<u>(\$397,749)</u>	<u>\$2,604,192</u>	<u>\$3,256,195</u>	<u>\$3,793,055</u>	<u>\$9,325,277</u>	<u>\$2,074,601</u>
Covered payroll	\$33,838,528	\$33,359,101	\$34,810,851	\$34,537,376	\$34,281,695	\$34,325,368	\$33,336,632	\$34,700,819	\$35,023,262	\$33,579,668
Actual contributions as a percentage of covered payroll	21.12%	19.50%	17.27%	16.89%	15.45%	13.43%	12.39%	10.43%	9.12%	25.92%

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



APPENDIX B

SUMMARY OF MAIN BENEFIT PROVISIONS

Uniform Retirement System of Justices & Judges

Following is a summary of the major System provisions used to determine the System's financial position as of July 1, 2019. 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 authority	<p>The System became effective January 13, 1969.</p> <p>The System is provided for under Sections 1101-1111 of Title 20 of the Oklahoma Statutes.</p>
Administration	<p>The State Judicial Retirement Fund is administered by the Board of Trustees of the Oklahoma Public Employees Retirement System. The Board acts as the fiduciary for investment and administration of the System.</p>
Employees included	<p>All justices and judges of the Supreme Court, Court of Criminal Appeals, Workers Compensation Court, Court of Appeals or District Court who serve in the State of Oklahoma participate in the Uniform Retirement System for Justices and Judges.</p>
Member contributions	<p>Before September 1, 2005, basic member contributions equal 5% of salary, while married members could have elected an 8% contribution rate in order to provide survivor coverage. After September 1, 2005, the member contribution rate for all members is 8% of salary.</p>
Employer contributions	<p>Before July 1, 1997, the fund received an amount equal to 10% of the Court Fund receipts. After July 1, 1997, employer contributions were based on members' salaries and a yearly schedule and, effective January 1 2001, were changed to 2.0% of the member's salary. Effective for the fiscal years ending June 30, 2006, employer contributions increased to 3.0% of the member's salary and will increase annually up to 22.0% for fiscal years ending June 30, 2019, and thereafter.</p>
Service considered	<p>Any justice or judge who becomes a member of the System when first eligible will receive credit for all years of service with the Supreme Court, Court of Criminal Appeals, Workers' Compensation Court, Court of Appeals, or a District Court of the State of Oklahoma.</p>



Uniform Retirement System of Justices & Judges

Compensation considered	Salary received by the justice or judge while serving in the referenced courts.
Final average salary	The average monthly salary received during the thirty-six (36) highest months of active service as a justice or judge.
Eligibility for benefits	A justice or judge must complete eight (8) years of service to be eligible for any benefit from the System. A member who leaves the System, for any reason, prior to the completion of eight (8) years of service is entitled only to a return of his/her accumulated contributions without interest.
Normal retirement date	A member who completes eight (8) years of service and attains age sixty-five (65), or completes ten (10) years of service and attains age sixty (60), or completes eight (8) years of service and whose sum of years of service and age equals or exceeds eighty (80), may begin receiving retirement benefits at his/her request. For judges taking office after January 1, 2012, retirement age is sixty-seven (67) with eight (8) years of service or age sixty-two (62) with ten (10) years of service.
Normal retirement benefit	The benefit, payable monthly for the life of the member, is equal to 4% of average monthly salary multiplied by the number of years in service. In no event, however, will the benefit exceed 100% of final average salary.
Disability retirement	A member who completes fifteen (15) years of service, attains age fifty-five (55), and is ordered to retire by reason of disability is eligible for disability retirement benefits. The benefit, payable for life, is calculated in the same manner as a normal retirement benefit.
Survivor coverage	The spouse of a deceased active member who had met normal or vested retirement provisions may elect a spouse's benefit. The spouse's benefit is the benefit that would have been paid if the member had retired and elected the reduced benefit with the joint and 100% survivor option (Option B), or a 50% unreduced benefit for certain married participants making 8% of pay contributions prior to September 1, 2005. Spouses of members who made the voluntary contributions prior to July 1, 1999 and die or retire after July 1, 1999 may receive up to 65% of the unreduced benefit. If the member has ten (10) years of service and the death is determined to be employment related, this benefit is payable



Uniform Retirement System of Justices & Judges

Survivor coverage (cont.)

immediately to the spouse. Otherwise, the benefit is payable to the spouse on the date the deceased member would have been eligible. This benefit is payable only to the surviving spouse of a member and they must be married ninety (90) days prior to the member's termination of employment as a justice or judge.

Optional forms of retirement benefits

The Maximum Benefit is an unreduced single-life annuity with a guaranteed refund of the contribution accumulation. Three (3) other types of benefit payments are available to retiring members:

Option A – A reduced benefit with Joint and 50% Survivor annuity and a return to the unreduced amount if the joint annuitant dies.

Option B – A reduced benefit with Joint and 100% Survivor annuity and a return to the unreduced amount if the joint annuitant dies.

Original Surviving Spouse Plan – An unreduced benefit with Joint and 50% Survivor annuity available only to members who made additional voluntary survivor benefit contributions of 3% of salary prior to September 1, 2005. Spouses of members who made the voluntary contributions prior to July 1, 1999 and die or retire after July 1, 1999 may receive up to 65% of the unreduced benefit.

For married members, spousal consent is required for any option other than Option A, or a joint annuitant other than the spouse.

Post-retirement death benefit

Upon the death of any retired member, a \$5,000 lump-sum death benefit will be paid to the member's beneficiary. If there is no beneficiary, then the benefit will be paid to the estate.

Minimum benefits

In no event will a member, or the estate of a member receive an amount or amounts less than the member's accumulated contributions without interest.

If a former member is not eligible for any other benefit from the System, the member will receive a transfer of these contributions. Similarly, if a member dies while having no spousal coverage, or upon the death of a spouse receiving survivor benefits, the member's beneficiary will receive the excess of the accumulated contributions over all benefits received by either the member, or the member and the spouse combined.



Uniform Retirement System of Justices & Judges

Supplemental medical insurance	The System contributes the lesser of \$105 per month or the Medicare Supplement Premium to the Office of Management and Enterprise Services, Employees Group Insurance Division for members receiving retirement benefits.
Expenses	The expenses of administering the System are paid from the retirement trust fund.



APPENDIX C

STATEMENT OF ACTUARIAL ASSUMPTIONS

Uniform Retirement System of Justices & Judges

Economic Assumptions

Long-Term Rate of Return:	7.00% net of investment expenses per annum, compounded annually
Salary Increases:	3.75% per year
Payroll Growth:	3.50% per year
Ad hoc benefit increase assumption:	
Monthly benefits	No increases assumed
Medical supplement	No increases assumed
Projection of 401(a)(17) compensation limit:	Projected with inflation at 2.75%

Demographic Assumptions

Retirement age:

<u>Attained Age</u>	<u>Annual Rates of Retirement Per 100 Eligible Members</u>
Below 59	7
59 – 61	10
62 – 66	15
67 – 68	20
69 – 74	25
75+	100

Deferred vested members

Participants with deferred benefits are assumed to commence benefits on a date provided by the System. Actives expected to terminate with a vested benefit are assumed to commence benefits at age sixty (60).

Mortality Rates:

Active participants and
non-disabled pensioners

RP-2014 Blue Collar Active/Retiree Healthy Mortality Table with base rates projected to 2025 using Scale MP-2016. For retirees, male rates are multiplied by 95% under age 70 and 105% over age 70, while female rates are multiplied by 90% and 115%. (For the multipliers, 5-year geometric smoothing is applied at age 70.) After all adjustments, ages are set back one year.



Uniform Retirement System of Justices & Judges

Mortality Rates (Cont):

Disabled pensioners

Nondisabled retiree mortality set forward 12 years for disabled experience.

Separation Rates:

Separation for all reasons other than death

2% for all years of service prior to retirement eligibility.

Disability Rates:

0%

Marital Status:

Age difference

Males are assumed to be four (4) years older than spouses.

Percentage married

85%

Other Assumptions:

Provisions for expenses

Administrative expenses, as budgeted for the Oklahoma Uniform Retirement System for Justices and Judges.

Form of payment

Active members who were contributing 8% of pay as of August 31, 2005, are assumed to retire with an unreduced benefit payable as a 50% Joint and Survivor annuity. All other members are assumed to retire with a life-only annuity.

Age

For members who have not completed the application process and are missing a date of birth, we assume they are 50 years old as of the valuation date.

Service

For members who have not completed the application process and are missing an entry date, we assume they have half a year of service as of the valuation date.