



A DEFINED BENEFIT ACTUARIALVALUATION

For:

Regional University System of Oklahoma Supplemental Retirement Plan

As of: July 1, 2020

Issued: December 23, 2020

Prepared by: USI Consulting Group

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VALUATION AS OF JULY 1, 2020

PRINCIPAL RESULTS OF THE VALUATION

Below is a summary of the principal results of this year's valuation compared with the previous valuation. Amounts for each valuation period reflect the actuarial cost method, assumptions and plan benefits in effect at that time.

	 2019*		2020
(A) Actuarially Determined Contribution			
(1) As of July 1	\$ 3,555,946	\$	3,768,609
(B) Supporting Information			
(1) Market Value of Assets	\$ 29,508,962	\$	27,607,271
(2) Actuarial Value of Assets	\$ 29,508,962	\$	27,607,271
(3) EAN Accrued Liability	\$ 56,633,255	\$	56,922,025
(4) Funding Ratio - Actuarial Value (2) ÷ (3)	52.11%		48.50%
(5) Funding Ratio Discount Rate	6.00%		6.00%
(6) Number of Lives Included in the Valuation	1,067		1,025
(7) Present Value of all Future Benefits	\$ 56,699,179	\$	56,959,040

^{*2019} results provided by the prior actuary.

VALUATION AS OF JULY 1, 2020

EXECUTIVE SUMMARY

Purpose and Scope

The principal purposes of this actuarial valuation report are:

- 1. To present our calculations of the Actuarially Determined Contribution for the Plan Year beginning July 1, 2020,
- 2. To review Plan experience during the year ended June 30, 2020 and the funded status of the Plan as of July 1, 2020, and
- 3. To provide an assessment and disclosure of risk with respect to pension obligations and contributions.

The valuation is based upon employee data and financial information provided by the individual universities that make up the Regional University System of Oklahoma. This data was not audited or otherwise verified by us other than for tests of reasonable consistency with prior year data.

The actuarial liabilities shown in this report are determined using software purchased from an outside vendor which was developed for this purpose. Certain information is entered into this model in order to generate the liabilities specific to your pension plan. These inputs include economic and non-economic assumptions, plan provisions and census information. We rely on the coding within the software to value the liabilities using the actuarial methods and assumptions selected. Both the input to and the output from the model is checked for accuracy and reviewed for reasonableness.

Risk Assessment

This report includes information related to Actuarial Standards of Practice Number 51 (ASOP 51), Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Contributions.

Traditionally, the focus of valuation reports has centered around the current funded status of the Plan, experience during the prior year, and contribution requirements for the current year. This is now supplemented with additional information regarding risks that plan sponsors face as well as more historical information and measurements. The report does not provide: risk assessments related to potential legislative and regulatory changes, investment advice, or assessments of the ability or willingness of plan sponsors to make contributions to the Plan.

Actuarial Methods, Assumptions and Provisions

This valuation report is based on the cost method, assumptions, and Plan provisions outlined at the end of this report, starting on page 20. The Actuarially Determined Contribution is calculated in accordance with the plan's funding policy.

VALUATION AS OF JULY 1, 2020

(Continued)

We have updated the mortality tables to use the PubT-2010(A) Mortality tables, by status: employee, retiree, survivor, and for deferred participants, employee pre-commencement and retired post-commencement, with MP-2020 generational scaling. All other methods and assumptions remain the same as the 2019 Valuation Report.

In our opinion, all costs, liabilities, rates of interest and other factors under the Plan have been determined on the basis of actuarial assumptions and methods, which are each reasonable, taking into account the experience of the Plan in addition to future expectations and which, when combined, represent our best estimate of anticipated experience under the Plan.

Plan Experience

During the 2019 plan year, the market value of Plan assets decreased from \$29,508,962 to \$27,607,271, with a net investment return of 5.22%. The investment performance is less than the 6.00% assumption, creating a market value loss of about \$217,000. In addition, employer contributions were less than the actuarially determined contribution (ADC). Employer contributions totaled \$1,705,665, compared to an ADC of \$3,555,946, creating a loss of about \$2,013,000. This deficit puts upward pressure on future ADCs.

The Plan also experienced a liability gain of approximately \$1,071,000 primarily due to retirement experience (including those who retired from the qualified plan but had no SRA benefit due) and other data changes, partially offset by mortality losses.

The net actuarial loss this year is \$1,159,000.

The update to the mortality assumption caused the liability to increase about \$3,144,000.

VALUATION AS OF JULY 1, 2020

(Continued)

Contribution Requirements

The actuarially determined contribution is \$3,768,609, calculated as payable on July 1, 2020. Please see page 10 for more details. A breakdown of the actuarially determined contribution by location can be found on page 25.

Funding Policy

Actuarially determined contributions to the Plan are determined each year as part of the Actuarial Valuation process. These contributions are determined according to the following funding policy, which was adopted in September 2016:

Actuarial Cost Method: Entry Age Normal

Asset Valuation Method: TIAA-CREF Group Annuity account asset value used as the Market Value of

Assets

Amortization Method: The amortization period for all unfunded liability, including experience

gains and losses shall be 10 years from the date of this July 1, 2020 actuarial valuation. The funding policy is to fully fund the plan by

December 1, 2030.

Funding Status

The Plan's funding ratio, on an actuarial value of assets basis, as shown on Page 1, decreased from 52.11% in 2019 to 48.50% in 2020. The main reason for the decline in funding ratio was the change to the mortality assumption. If the mortality assumption had not been updated, the funding ratio would have been 51.34%.

The funding ratio is appropriate for assessing the need for or the amount of future contributions, based on the assumptions stated in this report.

Future measurements may differ significantly from the information contained within this report. These measurements will be based on the market value of assets, which varies based on the underlying portfolio experience, as well as Plan Sponsor contributions, benefit payments and expenses paid from Plan assets. Liability calculations will be produced in accordance with current census data, as well as the interest rates and mortality tables in effect at that time. There has been no analysis of potential future impacts associated with this report.

VALUATION AS OF JULY 1, 2020

(Continued)

This report has been prepared in accordance with generally accepted actuarial standards and procedures and conforms to the Guidelines for Professional Conduct of the American Academy of Actuaries. It is based upon the employee and financial data submitted to USI Consulting Group by the Plan Sponsor and the retirement Plan provisions as outlined herein.

I, Jaime Packer, ASA, EA, MAAA, am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

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VALUATION AS OF JULY 1, 2020

FINANCIAL STATEMENT AS OF 7/1/2020

I. Statement of Assets and Liabilities	7/1/2019		 7/1/2020	
(A) Assets				
(1) Cash (and Money Market Funds)	\$	0	\$ 0	
(2) Receivables				
(a) Employer Contribution Receivable	\$	0	\$ 0	
(b) Participant Contribution Receivable		0	0	
(c) Interest Receivable		0	0	
(d) Other Receivable		0	0	
(e) Other		0	0	
(f) Total Receivables	\$	0	\$ 0	
(3) Investments				
(a) Investment Securities	\$	0	\$ 0	
(b) Mutual Funds		0	0	
(c) Corporate Bonds		0	0	
(d) US Treasuries		0	0	
(e) Group Annuity Accounts		29,508,962	27,607,271	
(f) Total Investments	\$	29,508,962	\$ 27,607,271	
(4) Other Assets				
(a) Insurance Contracts	\$	0	\$ 0	
(b) Other		0	0	
(c) Total Other Assets	\$	0	\$ 0	
(2) Total Assets	\$	29,508,962	\$ 27,607,271	
(B) Liabilities				
(1) Payables	\$	0	\$ 0	
(2) Other Liabilities		0	0	
(3) Other Liabilities		0	0	
(4) Total Liabilities	\$	0	\$ 0	
(C) Net Assets	\$	29,508,962	\$ 27,607,271	

VALUATION AS OF JULY 1, 2020

FINANCIAL STATEMENT AS OF 7/1/2020 (Continued)

II. Statement of Receipts and Disbursements	
(A) Net Assets at Beginning of Year	\$ 29,508,962
(B) Receipts	
(1) Contributions Received or Receivable	
(a) Employers	\$ 1,705,665
(b) Employees	0
(c) Other	0
(d) Total Contributions	\$ 1,705,665
Income	
(a) Dividends and Interest	\$ 147,809
(b) Net Realized Gain (Loss)	0
(c) Net Unrealized Gain (Loss)	710,086
(d) Guaranteed Interest	596,071
(e) Total Income	\$ 1,453,966
(C) Disbursements	
(1) Distribution of Benefits	
(a) Directly to Participants or Beneficiaries	\$ 5,061,322
(b) Other to participants	0
(c) Other	0
(d) Total Distribution of Benefits	\$ 5,061,322
(2) Expenses	
(a) Administrative and Professional Fees	\$ 0
(b) Investment Expenses	0
(c) Other	0
(d) Other	0
(e) Total Expenses	\$ 0
(D) Net Income (loss)	\$ (1,901,691)
(E) Net Assets at Year End	\$ 27,607,271
(F) Returns	
(1) Net Investment Return	5.22%
(2) Gross Investment Return	5.22%

VALUATION AS OF JULY 1, 2020

VALUATION RESULTS AS OF 7/1/2020

(A) Present Value of Future Benefits

The value of all projected retirement, death, disability, and vested termination benefits expected to be paid to all current plan participants, discounted to the valuation date with interest, mortality, withdrawal, and disability decrements.

Active	\$ 1,997,907
Terminated Vested	1,382,053
Retired - Old Plan	1,398,550
Retired - New Plan	52,180,530
Total	\$ 56,959,040

(B) Entry Age Accrued Liability

The portion of the present value of future benefit attributable to prior normal costs.

Active	\$ 1,960,891
Terminated Vested	1,382,053
Retired - Old Plan	1,398,550
Retired - New Plan	52,180,531
Total	\$ 56,922,025
(C) Valuation Assets	27,607,271

(E) Entry Age Normal Cost

(D) Unfunded Accrued Liability

The amount required to fund the present value of benefits as a level percent of pay from entry age to retirement age.

(1) Total EAN Normal Cost \$ 11,122

29,314,754

VALUATION AS OF JULY 1, 2020

DETERMINATION OF GAIN/(LOSS) AS OF 7/1/2020

(A) ASSET GAIN/(LOSS) AS OF 7/1/2020	
 (1) Expected valuation assets as of 7/1/2020 (a) Valuation asstes as of 7/1/2019 (b) Expected return on assets at 6.00% (c) Contributions, including receivable (d) Benefit Payments (e) Net interest on (c) + (d), weighted for timing 	\$ 29,508,962 1,770,538 1,705,665 (5,061,322) (99,203)
(f) Total	\$ 27,824,640
(2) Actual valuation assets as of 7/1/2020	\$ 27,607,271
(3) Asset gain/(loss) as of 7/1/2020: (2) - (1)(f)	\$ (217,369)
(B) LIABILITY GAIN/(LOSS) AS OF 7/1/2020	
 (1) Expected EAN Accrued Liability as of 7/1/2020 (a) EAN accrued liability as of 7/1/2019 (b) Total normal cost (c) Expected return at 6.00% (d) Benefit Payments (e) Net interest on (d), weighted for timing 	\$ 56,633,255 27,968 3,399,674 (5,061,322) (149,628)
(f) Total	\$ 54,849,947
(2) Actual EAN accrued liability as of 7/1/2020	\$ 56,922,025
(3) Liability gain/(loss) as of 7/1/2020: (1)(f) - (2)	\$ (2,072,078)
(4) Liability gain/(loss) due to assumption change	\$ (3,143,604)
(5) Liability gain/(loss) due to plan change	\$ 0
(6) Liability experience gain/(loss): (3) - (4) - (5)	\$ 1,071,526
(C) TOTAL GAIN/(LOSS) AS OF 7/1/2020	
 (1) Expected UAL as of 7/1/2020 (a) UAL as of 7/1/2019 (b) Total normal cost (c) Expected return at 6.00% (d) Contributions, including receivables (e) Net interest on (d), weighted for timing 	\$ 27,124,293 27,968 1,629,136 (1,705,665) (50,425)
(f) Total	\$ 27,025,307
(2) Actual UAL as of 7/1/2020	\$ 29,314,754
(3) Total gain/(loss) as of 7/1/2020: (1)(f) - (2)	\$ (2,289,447)
(4) Total experience gain/(loss) as of 7/1/2020: C(3) - B(4) - B(5)	\$ 854,157
(5) Gain/(loss) due to contribution policy	\$ (2,013,213)
(6) Net total gain/(loss): (4) + (5)	\$ (1,159,056)

VALUATION AS OF JULY 1, 2020

CONTRIBUTION REQUIREMENTS FOR PLAN YEAR ENDING JUNE 30, 2021

The Plan has an Unfunded Accrued Liability using the Individual Entry Age Normal cost method. The Actuarially Determined Employer Contribution (ADC) will be the Plan's Normal Cost plus the sum of the amortization base calculated below to fully fund the plan by December 1, 2030.

I. Actuarially Determined Employer Contribution

(A) Charges

(1) Employer Normal Cost		\$ 11,122
(2) Unfunded Accrued Liability	\$ 29,314,754	
(3) Amortization of Unfunded Accrued Liability		3,757,487
(4) Total Charges as of 7/1/2020: (1) + (3)		\$ 3,768,609
(5) Total Interest on (4) to 6/30/2021		\$ 226,117
(B) Summary of the Annual Contibutions		
(1) Total ADC as of 7/1/2020		\$ 3,768,609
(2) Total ADC as of 6/30/2021		\$ 3,994,726

II. Amortization Schedule

	Year		Outstanding	Amortization	Years
	Est.	Initial Amount	Balance	Payment	Rem.
Unfunded Liability	2020	29,314,754	29,314,754	3,757,487	10.0

VALUATION AS OF JULY 1, 2020

ASOP 51 ASSESSMENT AND DISCLOSURE OF RISK

Additional Information Regarding Assessment and Disclosure of Risks

The valuation of pension liabilities requires the use of certain assumptions to estimate events that are expected to occur in the future. These events can be economic, non-economic and demographic in nature. When actual experience in the future differs from the expected experience there is a direct effect on future pension liabilities. This in turn can impact both the funded position of the pension plan as well as the actuarially determined contribution amount.

Certain variables carry more risk than others. Included below is a brief explanation of those variables that can potentially have a significant effect on the plan's future financial condition.

Actuarially Determined Contribution Compared to Actual Contribution

The ADC is calculated using an actuarial funding method. The ADC can vary from year to year as actual experience differs from that expected. The funding method's intent is that if the ADC is deposited by the plan sponsor each year, then the plan would be sufficiently funded over the life of the plan so that promised benefits could be paid to all participants. A comparison of the ADC vs. contributions deposited by the plan sponsor for the most recent plan years are as follows:

Fiscal Year	ADC		ontribution
7/1/2019 - 6/30/2020	\$ 3,555,946	\$	1,705,665
7/1/2018 - 6/30/2019	\$ 3,280,304	\$	2,935,467
7/1/2017 - 6/30/2018	\$ 3.403.329	\$	4.033.354

If actual contributions deposited are consistently lower than the ADCs then, barring unexpected actuarial gains, future contributions will need to be greater. However, if actual contributions exceed the ADC, then the plan's funded status will improve.

Risk Assessments

There is an expectation that assets of the pension plan will return an average long-term rate each year. If the actual annual net return on plan assets is consistently below the expected return, then both the funded ratio and ADC would be negatively impacted - the funded ratio would be lower than expected and the ADC would be higher. For example, an asset "loss" (where the loss is the value relatives to expected growth) of 10% (about \$2,761,000 based on current values) in a given year would hypothetically cause the amortization portion of the ACD to incease on average by about \$354,000 for each of the next 10 years. Also, the funded ratio would decrease by about 4.9%. An asset "gain" of 10% would result in a decrease in the amortization of \$354,000 for 10 years and the funded ratio would increase by 4.9%.

VALUATION AS OF JULY 1, 2020

ASOP 51 ASSESSMENT AND DISCLOSURE OF RISK (Continued)

Investment Return Risk

The interest rate (which is equal to the Plan's expected return on assets rate) is used to discount the projected benefit payments from the Plan to calculate the present value of the liabilities (Accrued Liability). Decreases in the interest rate (as noted above) will lead to increases in the Accrued Liability and the Normal Cost, which may increase contribution requirements. As an example, a decrease of 25 basis points would lead to an increase in Accrued Liability of about 2.0% and in Employer Normal Cost of about 7.4%, yielding an increase in the ADC of about \$111,000.

Longevity Risk

To the extent participants live longer than expected relative to the mortality assumptions, liabilities (and, thus, the ADC) will increase. We have updated the mortality assumption to the PubT-2010(A) Mortality tables, by status, with MP-2020 generational scaling. The new table added roughly 1.7 years to the life expectancy of an average 75 year old retiree. The increased longevity under this new assumption versus the prior use of the IRS 2019 Static Mortality table increased the accrued liability of the plan by \$3,144,000, or 5.8%.

Demographic Risk

Several other assumptions are made with respect to anticipated plan experience, including rates of termination, disability, and the retirement age. To the extent actual experience differs from expected, plan liabilities and normal cost can vary up or down.

Salary Increases

Salary increases impact the cost of the plan and are reflected in the liabilities and the normal cost. Increases above that which are assumed will result in experience losses in the following year, while the inverse is true – lower than expected raises can lead to a decrease in normal costs. For example, if the annual salary increase assumption of 2.50% was increased to 3.50%, the Accrued Liability would increase 0.1% and the Employer Normal Cost would increase about 29.0%, adding another \$11,000 to the ADC. If instead, the assumption was decreased to 1.50%, the Accrued Liability would decrease by 0.1% and the Employer Normal Cost would decrease by 23.6%, reducing the ADC by \$10,000.

Expense Load

Certain expenses related to the administration of the plan are often paid out of plan assets (to the extent allowed by law). As a way to ensure plan assets are not depleted over time due to administrative costs, an expense load (usually a flat dollar amount or a small % of plan assets) may be added to the plan's normal cost, which is part of the contribution made by the plan sponsor each year. When actual administrative expenses for a given year are different from the assumed load amount, the plan will experience gains or losses that will be factored into the following year's contribution levels. The plan sponsor did not pay expenses from plan assets during the plan year July 1, 2019 - June 30, 2020.

VALUATION AS OF JULY 1, 2020

ASOP 51 ASSESSMENT AND DISCLOSURE OF RISK (Continued)

Plan Maturity Measures

Certain statistics can help to gauge the financial strength of the pension plan as well as to help identify risk that the plan might be subject to as it matures over time. Certain plan maturity statistics for the current valuation year are included below for your review and analysis. Historical statistics incorporating some of the prior year results may be found in the Executive Summary section of this report.

Ratio of Retiree Liability to Total Plan Liability

Ratio = \$53,579,000 / \$56,922,000 = 94.1%

A pension plan with a high ratio (for example, more than 50%) is considered to be a relatively mature plan since the primary liability is associated with former employees who are now in pay status. As a result, a large amount of plan assets is disbursed to retired participants to satisfy the monthly payments due to this group. Plan sponsors should consult with the investment advisors to the pension plan to determine whether plan assets are invested accordingly to account for the benefit outflows.

Duration of the Actuarial Accrued Liability

The duration for your pension plan is approximately: 7.9, representing the average percentage change in the plan's actuarial accrued liability for a 100bp change in the interest rates used to measure plan liabilities. In general, pension plans with a younger participant group tend to have a larger duration than pension plans with an older population. Plans with a larger duration have liabilities that change more than pension plans with smaller duration when interest rates change. Also, changes in plan liabilities when interest rates drop will be larger than the changes in plan liabilities when interest rates rise by similar amounts. For example, a 100-basis point decrease in interest rates will increase your plan's actuarial accrued liability by 8.5% while a 100-basis point increase in interest rates will decrease your plan's actuarial accrued liability by -7.4%.

Ratio of Actuarially Determined Contribution to Total Covered Payroll

Ratio = \$3,769,000 / \$11,283,000 = 33.4%

Many plan sponsors find it helpful to look at the cost of the pension plan (on a cash basis) as a percentage of total covered payroll. Covered payroll is generally intended to mean total compensation for those employees actively accruing plan benefits during the year plan. An increase in this ratio (ADC/payroll) could be due to various different factors which may require further analysis. For example, the increase could be a result of a decline in the active population of a plan where participation for new employees is frozen - as the active group decreases over time, compensation for the remaining population increases due to service/raises/promotions.

VALUATION AS OF JULY 1, 2020

ASOP 51 ASSESSMENT AND DISCLOSURE OF RISK (Continued)

Ratio of Expected Outflows to Plan Assets

Ratio = \$5,284,000 / \$27,607,000 = 19.1%

Outflows are defined as: Benefit Payments + Expenses. This ratio measures the liquidity and time-horizon of the plan's assets. It can be used as one of the considerations of how much of the plan's assets should be allocated to short-term fixed income (or cash). Having sufficient amounts of cash on-hand within plan assets better allows for monthly benefit payments (and expenses, if applicable) to be made throughout the year without having to liquidate funds for cash flow at unexpected points in time.

Ratio of Expected NET Outflows to Plan Assets

Ratio = (\$1,515,000) / \$27,607,000 = -5.5%

Net Outflows are defined as: Contributions – Outflows. This ratio represents the net cash flow of the Plan. A positive ratio means more cash is coming into plan assets than being paid out during the plan year, which is referred to as 'positive cash flow'. Thus, the opposite is true – a negative ratio means 'negative cash flow'. As a defined benefit plan matures, it (by its nature) becomes a negative net cash flow vehicle, so this ratio can be a measure of plan maturity.

Funded Status

Ratio = \$27,607,000 / \$56,922,000 = 48.5%

This statistic measures how well funded the pension plan is as of July 1, 2020 and is based on the ratio of the plan's market value of assets to the actuarial accrued liability. The funded status is impacted primarily by investment returns, interest rate changes, and pension plan funding policies. Additional factors, such as plan benefit or assumption changes, plan demographics and actual experiences, can also impact the funded status from year to year. Investment returns lower than expected may result in a ratio decrease. A drop in the interest rate would result in liability increases and the opposite occurs when interest rates increase. To the extent that more or less than the actuarially determined contribution is deposited to plan assets during the year, then the plan would be better or worse funded than expected.

Summary of Risk Assessments and Maturity Measures

While the risk due to some variables may easily be understood or predictable, there are many risks that are much more variable in nature, making it quite difficult to hedge against drastic changes in the plan's funded status. While past actuarial and demographic experience is not a perfect indicator of what the future will bring, it does provide a strong foundation for setting assumptions related to risk.

VALUATION AS OF JULY 1, 2020

PARTICIPANT DATA AS OF 7/1/2020

(A) Reconciliation of Participant Status

			Deferred	Retired -	Retired -	
	Active	Inactive	Vested	New Plan	Old Plan	Total
As of 7/1/2019	186	0	24	762	95	1,067
Terminated Not Vested	(20)		(2)			
Terminated Vested						(22)
Retired				9		
Deceased				(19)	(11)	(19)
New Spouse in Pay				11		(11)
Data Corrections			(1)			
As of 7/1/2020	157	0	21	763	84	1,025

VALUATION AS OF JULY 1, 2020

Board of Regents of Oklahoma Colleges (A) Active Employees	New Plan		Old Plan	
(1) Number(2) Total Annual Compensation(3) Average Attained Age(4) Average Prior Credited Service	\$	1 140,159 58.7 27.0	\$ 0 - - -	
(B) Terminated Vested				
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	0 - -	\$ 0 - -	
(C) Retirees and Beneficiaries				
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	2 592.50 79.7	\$ 0 - -	
East Central University (A) Active Employees				
(1) Number(2) Total Annual Compensation(3) Average Attained Age(4) Average Prior Credited Service	\$	20 1,305,171 62.2 30.5	\$ 0 - -	
(B) Terminated Vested				
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	7 519.49 69.0	\$ 0 - -	
(C) Retirees and Beneficiaries				
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	89 603.18 72.6	\$ 9 323.33 85.2	

VALUATION AS OF JULY 1, 2020

Northeastern State University (A) Active Employees	ا	New Plan	Old Plan
(1) Number(2) Total Annual Compensation(3) Average Attained Age(4) Average Prior Credited Service	\$	28 2,141,892 60.6 29.6	\$ 0 - - -
(B) Terminated Vested			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	6 247.71 70.0	\$ 0 - -
(C) Retirees and Beneficiaries			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	190 563.21 74.2	\$ 21 174.19 89.4
Northwestern Oklahoma State University (A) Active Employees			
(1) Number(2) Total Annual Compensation(3) Average Attained Age(4) Average Prior Credited Service	\$	9 537,304 60.8 31.0	\$ 0 - -
(B) Terminated Vested			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	2 161.50 67.0	\$ 0 - -
(C) Retirees and Beneficiaries			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	49 516.07 71.2	\$ 2 127.50 89.8

VALUATION AS OF JULY 1, 2020

Southeastern Oklahoma State University (A) Active Employees	I	New Plan	Old Plan
(1) Number(2) Total Annual Compensation(3) Average Attained Age(4) Average Prior Credited Service	\$	10 754,063 56.0 30.6	\$ 0 - - -
(B) Terminated Vested			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age(C) Retirees and Beneficiaries	\$	- -	\$ 0 - -
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	81 475.44 72.9	\$ 14 399.27 86.4
Southwestern Oklahoma State University (A) Active Employees			
(1) Number(2) Total Annual Compensation(3) Average Attained Age(4) Average Prior Credited Service	\$	34 2,515,370 59.9 30.5	\$ -
(B) Terminated Vested			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	4 956.91 68.4	\$ 0 - -
(C) Retirees and Beneficiaries			
(1) Number(2) Average Monthly Accrued Benefit(3) Average Attained Age	\$	113 508.47 73.8	\$ 7 141.14 84.5

VALUATION AS OF JULY 1, 2020

University of Central Oklahoma (A) Active Employees	1	New Plan	Old Plan		
(1) Number		55		0	
(2) Total Annual Compensation	\$	3,888,854	\$	-	
(3) Average Attained Age		64.5		-	
(4) Average Prior Credited Service		30.3		-	
(B) Terminated Vested					
(1) Number		2		0	
(2) Average Monthly Accrued Benefit	\$	611.00	\$	-	
(3) Average Attained Age		67.2		-	
(C) Retirees and Beneficiaries					
(1) Number		241		29	
(2) Average Monthly Accrued Benefit	\$	493.92	\$	306.19	
(3) Average Attained Age		74.5		89.3	

VALUATION AS OF JULY 1, 2020

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Cost Method

Individual entry age normal, level percent of pay. Under this method the annual cost is equal to the normal cost plus an amortization of unfunded accrued liabilities over a fixed period of years.

The normal cost is the sum of individual normal costs, determined as a level percentage of compensation which would have been necessary to fund the employee's projected retirement, death and withdrawal benefits, from entry age (the age at which the employee would have entered the plan had it been in effect on his employment date), to his retirement age. Thus, the dollar normal cost is expected to increase with the salary projection assumption.

The actuarial accrued liability is the accumulation, based on the actuarial assumptions, of all assumed prior normal costs. Thus, it represents the amount of reserves, which would be held by the Plan, had it always been in effect for the present group of participants and had Plan experience followed that predicted by the actuarial assumptions. The unfunded accrued liability is the excess, if any, of the accrued liability over the Plan assets.

Under the funding policy adopted in September 2016, the plan must achieve 100% funding of the actuarial liability by December 1, 2030. Actuarial gains and losses arising from differences between Plan experience and that predicted by the actuarial assumptions, as measured by the difference between actual and expected unfunded accrued liabilities, are amortized to meet the December 1, 2030 funding target. The amortization

Attribution Parameters

Attribution parameters determine how growth in the benefit formula is allocated to years of service.

Accrual rate proration, by component – This method attributes the benefit separately for each component of the benefit formula, based on the credited service. If there are no accrual definitions in the benefit formula, then the entire projected benefit is assigned to past service (and considered fully accrued as of the valuation date). This results in "natural" or "direct differencing" attribution.

ACCRUED AND VESTED BENEFITS

Vested benefits are based on the Plan Document's vesting schedule based on years of service. Please refer to the Summary of Plan Provisions section of this report for requirements for particular benefits.

VALUATION AS OF JULY 1, 2020

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

Interest Rate: 6.00%

Mortality: PubT-2010(A) Mortality tables, by status: employee, retiree, survivor, and

for deferred participants, employee pre-commencement and retired post-commencement, with MP-2020 generational scaling. For contingent annuitants, the same mortality basis as the original retiree is used while the original retiree is still alive and contingent survivor tables are used after the

death of the original retiree.

Retirement: Upon attainment of the later of Age 63 or vesting age

<u>Withdrawal:</u> Table T-3; sample rates are found below

Age	Rate	Age	Rate	Age	Rate
25	5.270%	40	3.841%	55	0.334%
30	4.831%	45	3.215%	60	0.000%
35	4.474%	50	1.525%	65	0.000%

<u>Disability:</u> None

<u>Salary Scale:</u> 2.50% per year, compounded annually

<u>Payment Form Election:</u> Single life annuity

Expense Load: None

Return on Assets: 6% annually

The return reflects the anticipated gross long-term rate of return based on the current and expected future asset portfolio, as supported by the Plan's investment manager, given recent Committee approval for the following:

- Redeeming 10% of balances from the TIAA Traditional (stable value fund) in 2020 and in 2021
- Re-allocating proceeds from redemptions to CREF Equity Index (75%) and CREF Growth (25%), except where balances for certain RUSO Plans were below \$15k, then 100% goes to CREF Equity Index
- RUSO Plans with CREF Stock fund or CREF REIT fund are redeeming in full, with proceeds 75%/25%, respectively
- Re-aligning each of the RUSO Plans so that strategically, each contains about 50% equities (75% CREF Equity Index and 25% Growth) and 50% fixed income (either TIAA traditional/CREF Bond Account)

VALUATION AS OF JULY 1, 2020

SUMMARY OF PLAN PROVISIONS

Effective Date: July 1, 1995

Plan Year Beginning: July 1, 2020

Plan Sponsor: Regional University System of Oklahoma

<u>Eligibility Requirements:</u> Full-time employees hired before July 1, 1995 and OTRS member before

July 1, 1995

All active participants as of July 1, 1995 are covered under the "new" plan as part of a new Group Annuity Contract issued as of that date, while all those who had retired prior to July 1, 1995 are covered under the "old" plan as part of the Group Annuity Contract established September 1,

1992.

Normal Retirement Eligibility: Earlier of (a) age 62 with 10 years OSSHE service and 10 years of OTRS

service and (b) Rule of 80 based on OTRS service with 10 years of OSSHE

service; if hired on or after July 1, 1987, 15 years replaces 10 years

Normal Retirement Benefit: Greater of:

(a) Method One: 50% of the highest three-year average monthly salary less the maximum OTRS benefit times the ratio of the OSSHE service (capped at 25) divided by 25

(b) Method Two: 2.4% of the highest three-year average base salary times OSSHE service (capped at 30) less the maximum

OTRS benefit, divided by 12

For participants hired on or after to June 30, 1987, the denominator of 25

is replaced by 30 in the Method One calculation

Maximum OTRS Benefit: 2% of final average compensation (capped at \$40,000) times pre-July 1,

1995 OTRS service; plus 2% of final average compensation (with an indexed cap) times post-July 1, 1995 OTRS service through July 1, 2007; plus 2% of final average compensation (no cap) times post-July 1, 2007

OTRS service

OSSHE Benefit Service: Six months as a full-time employee in a fiscal year

OTRS Benefit Service: Six months as a contributing member; effective December 1, 2002, this

includes sick leave and military leave

<u>Vesting Service:</u> OSSHE service years within RUSO

VALUATION AS OF JULY 1, 2020

SUMMARY OF PLAN PROVISIONS (Continued)

Average Base Earnings: Highest three-year average of base salary

Average Monthly Salary: Greater of high three regular 10 months divided by 30 or 3 regular 12

OTRS Base Salary: Wages plus employer-paid fringe benefits for the fiscal year

<u>Final Average Compensation:</u> Highest three-year average if joined before July 1, 1992, otherwise highest

five-year average

Early Retirement Eligibility: Earlier of (a) Age 55 with 10 years OSSHE service and 10 years OTRS

service and (b) 30 years OTRS service with 10 years OSSHE service; if hired

on or after July 1, 1987, 15 years replaces 10 years

Early Retirement Benefit: Accrued benefit reduced by actuarial equivalence for early

commencement if the participant is not eligible for the Rule of 80 (based

on OTRS service); appendix A factors if greater than age 55

<u>Late Retirement:</u> Continued accrual of benefit to late retirement date

<u>Vesting Requirements:</u> Earlier of (a) Age 52 and 10 year RUSO service; (b) 25 years RUSO service;

and (c) Rule of 80 (OTRS service) and 10 years RUSO service; if hired on or

after July 1, 1987, 10/25 years replaced by 15/30 years

Death Benefit Eligibility: For vested employees, the benefit is payable on or after the spouse

reaches age 55

<u>Death Benefit:</u> If Rule of 80 (based on OTRS service), the amount the beneficiary would

receive if the participant retired on the date of death and elected a 100% joint and survivor benefit; otherwise, the amount the beneficiary would receive if the participant terminated on the date of death and survived to

commence a 100% joint and survivor at age 55

Forms of Payment: Normal Form: Single Life Annuity

Optional Forms: 50% or 100% joint and survivor with pop-up (spousal

only)

Actuarial Equivalence: Interest 8%; 1983 GAM, setback two years for males, one year for

females, participants 40% male/60% female, beneficiaries 60% male/40%

female

VALUATION AS OF JULY 1, 2020

SUMMARY OF VALUATION RESULTS BY UNIVERSITY LOCATION

Name:	BOR	ECU		NS	U	NW SE			SW		uco		TOTALS	
		New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	
Participant Count														
Active	1	20	0	28	0	9	0	10	0	34	0	55	0	157
Terminated Vested	0	7	0	6	0	2	0	0	0	4	0	2	0	21
Retired	2	89	9	190	21	49	2	81	14	113	7	241	29	847
Total	3	116	9	224	21	60	2	91	14	151	7	298	29	1,025
Accrued Liability														
Active	\$72,700	\$336,235	\$0	\$275,750	\$0	\$218,603	\$0	\$42,678	\$0	\$447,995	\$0	\$566,930	\$0	\$1,960,891
Terminated Vested	\$0	\$442,349	\$0	\$206,880	\$0	\$48,117	\$0	\$0	\$0	\$515,282	\$0	\$169,425	\$0	\$1,382,053
Retired	\$106,889	\$7,118,258	\$214,992	\$13,745,863	\$226,950	\$3,414,143	<u>\$15,726</u>	\$5,135,900	\$368,794	\$7,640,986	\$69,328	\$15,018,492	\$502,760	\$53,579,081
Total	\$179,589	\$7,896,842	\$214,992	\$14,228,493	\$226,950	\$3,680,863	\$15,726	\$5,178,578	\$368,794	\$8,604,263	\$69,328	\$15,754,847	\$502,760	\$56,922,025
Actuarial Assets	\$90,178	\$2,907,007	\$74,218	\$4,142,641	\$1,766,418	\$1,203,577	\$10,207	\$1,569,952	\$350,498	\$3,804,292	\$77,490	\$10,246,212	\$1,364,581	\$27,607,271
Unfunded Accrued														
Liability (UAL)	\$89,411	\$4,989,835	\$140,774	\$10,085,852	(\$1,539,468)	\$2,477,286	\$5,519	\$3,608,626	\$18,296	\$4,799,971	(\$8,162)	\$5,508,635	(\$861,821)	\$29,314,754
Funded Ratio	50.21%	36.81%	34.52%	29.12%	778.33%	32.70%	64.91%	30.32%	95.04%	44.21%	111.77%	65.04%	271.42%	48.50%
Contracts	U-J351A	U-J31	20	U-J3:	520	U-J349	90	U-J35:	30	U-J350	Δ	U-J29	270	
Contracts	0 3331A	U-J31	-	U-J3:		U-J349A		U-J353A		U-J350A		U-J297A		
		0-1312		X-J35				X-J353A		X-J297A				
				V-13:)ZA			V-190	JA.			X-J25		

VALUATION AS OF JULY 1, 2020

SUMMARY OF VALUATION RESULTS BY UNIVERSITY LOCATION (Continued)

	BOR	ECU	NSU	NW	SE	SW	UCO	TOTALS
								_
Accrued Liability	\$179,589	\$8,111,834	\$14,455,443	\$3,696,589	\$5,547,372	\$8,673,591	\$16,257,607	\$56,922,025
Actuarial Assets	\$90,178	\$2,981,225	\$5,909,059	\$1,213,784	\$1,920,450	\$3,881,782	\$11,610,793	\$27,607,271
Unfunded Accrued								
Liability (UAL)	\$89,411	\$5,130,609	\$8,546,384	\$2,482,805	\$3,626,922	\$4,791,809	\$4,646,814	\$29,314,754
Funded Ratio	50.21%	36.75%	40.88%	32.84%	34.62%	44.75%	71.42%	48.50%
Actuarially Determined								
Contribution (ADC)								
Normal Cost	\$1,275	\$2,186	\$4,332	\$39	\$157	\$1,815	\$1,318	\$11,122
Amortization	\$11,460	\$657,628	\$1,095,454	\$318,239	\$464,889	\$614,201	\$595,616	\$3,757,487
ACD	\$12,735	\$659,814	\$1,099,786	\$318,278	\$465,046	\$616,016	\$596,934	\$3,768,609
Payroll	\$140,159	\$1,305,171	\$2,141,892	\$537,304	\$754,063	\$2,515,370	\$3,888,854	\$11,282,813
ADC as % of pay	9.09%	50.55%	51.35%	59.24%	61.67%	24.49%	15.35%	33.40%
Prior Year ADC								
ADC for 7/1/2019 -								
6/30/2020 Plan Year	\$13,466	\$585,010	\$1,223,591	\$273,335	\$401,904	\$494,281	\$564,359	\$3,555,946
Deposit Made during								
7/1/2019 - 6/30/2020								
Plan Year	\$20,000	\$0	\$1,012,000	\$273,335	\$400,330	\$0	\$0	\$1,705,665
Contracts	U-J351A	U-J3120	U-J3520	U-J3490	U-J353A	U-J350A	U-J2970	
Contracts	0-J25TA	U-J3120 U-J312A	U-J3520 U-J352A	U-J3490 U-J349A	U-J353A U-J3530	U-J350A U-J3500	U-J2970 U-J297A	
		0 33127	X-J352A	0 33437	X-J353A	0 13300	X-J297A	
							X-J297A	