

**TEACHERS' RETIREMENT
SYSTEM OF LOUISIANA**

JUNE 30, 2022

ACTUARIAL VALUATION



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October 6, 2022

Board of Trustees
Teachers' Retirement System of Louisiana
Post Office Box 94123, Capitol Station
Baton Rouge, Louisiana 70804-9123

Dear Board Members:

This report is prepared for the Board of Trustees of Teachers' Retirement System of Louisiana (TRSL) to present the results of the actuarial valuation of assets and liabilities and funding requirements, as of June 30, 2022. The primary purpose of the report is to provide a measure of the plan's liability and funding levels and to determine the actuarially required contribution for fiscal year ending 2023 and the projected actuarially required contribution rate for fiscal year ending 2024. Section IV provides disclosures of the Fiduciary Net Position and Net Pension Liabilities required by the Governmental Accounting Standards Board Statements 67/68. Results of the funding valuation and GASB valuations should not be relied upon for other purposes.

In preparing this valuation, we have relied upon the information provided by the System regarding plan provisions, plan membership, plan assets and other matters as detailed in this report. In particular, we have relied upon the Statements of Fiduciary Net Position and Changes in Fiduciary Net Position as audited by Hawthorne, Waymouth & Carroll, LLP, Certified Public Accountants. We did not audit the data or plan assets but reviewed for reasonableness and consistency with prior year data. Our review concluded that the data is reasonable and consistent with the prior year's data.

The liabilities and normal costs shown herein have been estimated on the basis of the actuarial cost method specified in Louisiana Revised Statutes Title 11 Section 22(B)(13). All actuarial assumptions have been adopted by the Board of Trustees and are reasonable and appropriate for the purposes of this valuation, unless otherwise stated herein. However, other sets of assumptions and methods could also be reasonable and could produce materially different results. Actual results may vary from the assumptions used to prepare the valuation.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion

or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements and changes in plan provisions or applicable law. The scope of this report does not include an analysis of the range of such future measurements.

In performing the valuations, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding and accounting rules to generate the costs. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

Appendix D has been included to comply with the guidance provided by Actuarial Standard of Practice, No 51, applicable to valuations on or after November 1, 2018. This report has been prepared in accordance with actuarial standards of practice, and to the best of our knowledge, fairly reflects the actuarial present value of accrued benefits of the Teachers' Retirement System of Louisiana.

Shelley is an Associate in the Society of Actuaries and Pat is a Fellow in the Society of Actuaries. Shelley and Pat are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

FOSTER & FOSTER INC.



Shelley R. Johnson, ASA, MAAA



D. Patrick McDonald, FSA, EA, MAAA, FCA

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PRESENTATION OF VALUATION RESULTS

SUMMARY OF VALUATION RESULTS

	----- Prior Years -----		
	June 30, 2022	June 30, 2021	June 30, 2020
I. Membership Census			
Retirees	82,600	81,620	80,536
Actives	86,364	85,980	86,860
DROP	2,172	2,227	2,359
Terminated Vested	9,245	8,409	7,992
II. Annual Benefits	\$2,200,753,752	\$2,120,995,108	\$2,072,641,570
III. Current Payroll			
Regular Teachers, Lunch Plans	3,738,515,788	3,586,756,266	3,498,582,193
Higher Education	802,906,101	748,334,382	731,038,788
Total	<u>4,541,421,889</u>	<u>4,335,090,648</u>	<u>4,229,620,981</u>
IV. Market Value of Assets	25,050,873,120	27,724,128,255	21,220,586,002
Valuation Assets	25,503,661,209	23,741,582,928	21,971,040,392
V. Investment Yield			
Market Value (Total Assets)	-7.45%	34.32%	0.82%
Market Value (Excl LaDROP Assets)	-7.58%	34.92%	0.83%
Actuarial Value	8.96%	12.65%	6.80%
DROP	8.46%	12.15%	6.30%
VI. Experience Account	79,455,322	369,000,000	97,714,607
VII. Total Normal Cost	518,573,249	482,490,694	468,547,375
Total Normal Cost % of Payroll	11.42%	11.13%	11.08%
Employer Normal Cost % of Payroll	3.44%	3.15%	3.10%
VIII. Unfunded Actuarial Accrued Liability	9,089,700,550	9,317,243,930	10,369,997,921
IX. Funded Percentage ¹	73.7%	71.8%	67.9%
X. Funding Requirements (Mid-year Pmt)			
1) Discount Rate (Current Year) ²	7.25%	7.40%	7.45%
Discount Rate (Next Year) ²	7.25%	7.25%	7.40%
2) Employee Contribution	365,363,682	348,655,596	340,628,608
3) Restated Required Employer Contribution	1,231,441,982	1,161,260,021	1,193,919,270
Aggregate Rate (Current Year) ³	24.2%	23.9%	25.0%
Restated Expected Employer Contribution ⁴	1,254,305,363	1,220,748,179	1,223,558,559
4) Projected Required Employer Contribution	1,233,544,891	1,215,753,986	1,214,905,342
Aggregate Rate (Next Year) ⁵	24.0%	24.7%	25.1%

The above funding requirements measure the cost of benefits that were in effect on June 30, 2022.

¹ See page 7 for additional information regarding the funding percentage and UAL impact due to discount rate reductions and past actuarial method changes.

² The assumed rate of return on investments is the discount rate plus 35 basis points for gain-sharing.

³ Reflects the restated aggregate employer contribution rate for the fiscal year following the valuation date.

⁴ The current year PRSAC approved employer contribution rate multiplied by restated current year projected payroll.

⁵ Reflects the projected aggregate employer contribution rate for fiscal year that begins one year after the valuation date.

PROJECTED CONTRIBUTION RATES BY PLAN

Act 716 of 2012 requires the employer contribution rate to be individually determined for each plan type as defined within the Act beginning with Fiscal Year 2012/2013. The term “plan” refers to each employer group specified in the Act, rather than each plan referring to a separate plan of benefits. The normal cost portion of each plan’s employer contribution rate varies based upon that plan’s benefits, member demographics, actuarial assumptions and the rate contributed by employees. The shared UAL contribution rate is determined in aggregate for all plans. The UAL established for a specific plan or group of plans by specific legislation will be allocated entirely to that plan or those plans. The recommended employer rates by plan are as follows:

	Recommended Employer Rate for FY 2023/2024					
	Total Normal Cost Rate	Aggregate Employee Normal Cost Rate	Employer Normal Cost Rate	Administrative Expense Rate	Shared UAL Rate	Total Employer Contribution Rate
Regular Teachers, Lunch A & B	11.6%	7.9794%	3.5748%	0.37%	20.16%	24.1%
Higher Education	10.8%	8.0000%	2.7880%	0.37%	20.16%	23.3%
Aggregate Rate	11.4%	7.9830%	3.4357%	0.37%	20.16%	24.0%

CHANGES SINCE PRIOR VALUATION

The discount rate for the June 30, 2022 valuation was reduced from 7.40% to 7.25%. This change was anticipated in the determination of the projected contribution requirements for Fiscal Year 2022/2023.

CHANGE IN FUNDING REQUIREMENTS

The aggregate employer contribution rate established by the Public Retirement Systems' Actuarial Committee for the 2022/2023 plan year was 24.7%. The restated employer contribution rate determined by this valuation for the 2022/2023 plan year is 24.2%. Therefore, a contribution surplus of 0.5% is expected next year.

Changes in the required contribution are generally the result of gains or losses resulting from actual experience differing from expected plan experience, expected changes in the UAL payment due to statutory requirements, and changes in actuarial assumptions or methods. Changes in the employer contribution rate are impacted by both the change in the total dollar required contribution and by the total aggregate payroll for active members.

The projected aggregate employer contribution rate decreased from 24.7% for Fiscal Year 2022/2023 to 24.0% for Fiscal Year 2023/2024. The reasons for the change are detailed below. The total of the items contributing to the contribution rate change may not exactly equal the actual contribution rate change due to rounding, and since the items impacting the rate are not additive and may overlap.

Employer Contribution Rate Reconciliation

Normal Cost	
Demographic/Plan Shift	-0.07%
Normal Cost Total Change	-0.07%
UAL Payment	
Investment Experience Gain	-0.11%
Experience Account Allocation	0.08%
Other Experience Loss	0.25%
Contribution Variance Payment Change	0.00%
Other	0.03%
Total UAL Payment Change	0.25%
Payroll Change	-0.93%
Administrative Expenses	0.01%
Total	-0.74%
Actual Contribution Rate Change	-0.70%

CHANGE IN UNFUNDED ACCRUED LIABILITY

The plan's total unfunded accrued liability (UAL) decreased, mainly due to principal reduction from receipt of UAL payments, an investment experience gain, and a contribution variance surplus. This decrease was partially offset by increases resulting from an allocation of investment experience gains to the experience account and a decrease in the discount rate.

Unfunded Liability - June 30, 2021		\$ 9,317,243,930
Interest on Unfunded Liability	\$ 689,476,051	
Employer Amortization Payment	(1,043,897,591)	
Act 170 of 2022 Appropriation	(48,092,612)	
Contribution Variance Surplus	(144,147,469)	
Investment Experience Gain	(350,363,780)	
Experience Account Allocation	30,502,699	
Other Experience Loss	140,840,045	
Act 657 of 2022 (2% PBI)	353,117,800	
Experience Account Disbursement	(353,117,800)	
Discount Rate Change (7.4% to 7.25%)	498,139,277	
Total Change		(227,543,380)
Unfunded Liability - June 30, 2022		\$ 9,089,700,550

PLAN EXPERIENCE

The actuarial assumptions represent the best estimate of future experience in order to properly fund benefits. The results of the actuarial valuation are dependent on the actuarial assumptions used. These assumptions, which are adopted by the Board of Trustees, are detailed in Appendix E of the valuation report. A gain or loss occurs if the actual experience differs from the prior year's projected plan measurements. The funding policy, in Appendix C, describes how investment and non-investment gains are amortized or allocated for other purposes.

Demographic and Salary Assumption Experience

Demographic assumptions include rates of retirement/DROP, rates at which members become disabled, turnover rates, mortality rates, and several other assumptions. Salary assumptions anticipate future salary increases. During the 2021/2022 plan year, the system incurred an experience loss of \$140,840,045 from plan experience differing from that anticipated by the demographic and salary assumptions. The loss is amortized over 20 years with level payments.

A breakdown of the non-investment experience gain/(loss) is provided below:

Source of Gain/(Loss)	Gain/(Loss)	% of Total Liability
Active Member Decrements	\$ (61,839,781)	-0.18%
Active Member Salaries	(194,138,984)	-0.56%
Inactive Mortality	56,879,468	0.16%
Administrative Expenses	60,261	0.00%
Other	58,198,991	0.17%
Total Change	\$ (140,840,045)	-0.41%

Investment Assumption Experience

The market value of assets and actuarial value of assets include funds from the DROP accounts created for members eligible for DROP after January 1, 2004, which are invested in money market accounts. The rate of return on the actuarial value of assets is determined for trust assets net of these accounts.

	Actuarial Value of Assets	Money Market DROP Accounts	Net Actuarial Value of Assets
Beginning Assets	\$ 24,114,655,748	\$ 365,170,080	\$ 23,749,485,668
Contributions	1,739,467,961	93,176,781	1,646,291,180
Benefits Payments and Expenses	(2,371,777,716)	(109,415,760)	(2,262,361,956)
Investment Income	2,105,558,239	6,849,685	2,098,708,554
Ending Asset Value	\$ 25,587,904,232	\$ 355,780,786	\$ 25,232,123,446
Net AVA Rate of Return			8.96%

For the plan year ending June 30, 2022, the System's actuarial rate of return of 8.96% was greater than the 7.40% discount rate, resulting in an investment experience gain of \$350,363,780. Investment experience losses are amortized over 20 years with level payments. Investment experience gains up to the threshold amounts, are allocated to the Original Amortization Base and Experience Account Allocation Base. The remaining gain is amortized over 20 years with level payments. One-half of the remaining gain is allocated to the experience account, up to the statutory cap, to be used to fund future permanent benefit increases, when granted by the legislature, and is amortized as a cost over ten years.

The development of investment gains/losses and any resulting allocations are shown below:

Development of Investment Gain/(Loss)	
A. Beginning Net Actuarial Value of Assets	\$ 23,749,485,668
B. Total Contributions	1,646,291,180
C. Benefits Payments and Expenses	2,262,361,956
D. Ending Net Actuarial Value of Assets	25,232,123,446
<hr/>	
E. Investment Income (D - A - B + C)	2,098,708,554
Investment Rate of Return	8.96%
F. Expected Investment Income	1,733,326,433
Expected Rate of Return	7.40%
G. Investment Gain/(Loss) (E - F)	365,382,121
H. Gain allocated to Side Funds or DROP Accounts	15,018,341
I. Net Investment Gain	\$ 350,363,780
Current Allocation of Gain Threshold to OAB/EAAB	
J. \$200,000,000 Indexed by AVA Increase	\$ 289,358,382
Allocation of Investment Gain	
K. Original Amortization Base (OAB) Credit (J / 2)	\$ 144,679,191
L. Experience Account Amortization Base (EAAB) Credit (J / 2)	144,679,191
M. Net Investment Gain (20-Year Amortization) (I - K - L)	61,005,398
<hr/>	
N. Total Investment Gain	350,363,780
O. Experience Account Credit (10-year amortization)	(30,502,699)
<hr/>	
P. Retained Investment Gain (N - O)	\$ 319,861,081

The historical geometric average rates of return on the total actuarial value of assets, net of investment expenses, for plan years ending June 30 are shown below. The discount rate reflects the expected return needed to fund regular plan benefits. The returns shown below are comparable to the discount rate plus returns expected to be allocated to the Experience Account.

	Actuarial Rate of Return		Geometric Average
2017	9.15%	5 Year	9.05%
2018	9.48%	10 Year	9.87%
2019	7.48%	15 Year	6.63%
2020	6.80%	20 Year	7.15%
2021	12.65%	25 Year	7.48%
2022	8.96%	30 Year	8.12%

DROP accounts for members eligible for DROP prior to January 1, 2004 are credited with interest following termination of DROP at the System's actuarial rate of return less a 0.5% expense adjustment, but not below zero. The DROP interest rate for the period July 1, 2021 through June 30, 2022 after the expense adjustment is 8.46%. DROP accounts for members eligible for DROP after January 1, 2004 are invested in money market accounts.

ACTUARIAL ASSETS/VALUATION ASSETS

The gross actuarial value of assets, developed in Section II, are determined based on the market value of assets, with gradual recognition of gains and losses relative to the discount rate over a five-year period in order to smooth the effects of short-term market volatility. Valuation assets are determined as the gross actuarial value of assets less the assets held in side-fund accounts. Valuation assets are used to determine the employer contribution rate (see Section III).

The side-fund accounts excluded from valuation assets are as follows:

Employer Credit Account: This account, established by Act 588 of 2004, accumulates the excess contributions based on the statutory minimum employer contribution rate of 15.5% over the actuarially required employer contribution (ARC), as restated in the current valuation. The minimum rate is not currently applicable, and the account continues to have a zero balance.

LSU Agriculture and Extension Service Fund: Participants of the LSU Agriculture and Extension Service receive supplemental benefits from TRSL equal to the difference between the TRSL benefit formula and the Federal Civil Service formula. The funding is recorded separately in the side-fund with assets commingled with the TRSL assets. The current balance is \$4,787,701.

Experience Account Fund: The account is used to fund permanent benefit increases for retirees. Fifty percent of any excess return above the statutory threshold will be credited to the Experience Account, up to the statutory maximum account balance, which is currently the expected cost of one permanent benefit increase. The account was credited with a \$30,502,699 from investment experience gains and interest on the current balance based on the System's actuarial return. The account was debited a total of \$353,117,800 to fund the Act 657 of 2022 permanent benefit increase. The current balance is \$79,455,322.

LEGISLATIVE/PLAN CHANGES

The following legislative Acts impact this or future actuarial valuations:

Act 170 of 2022 provided a supplemental appropriation of \$48,092,612 to TRSL to be applied to the IUAL, which is a component of the Original Amortization Base.

Act 657 of 2022 grants a 2% permanent benefit increase, payable July 1, 2022, to eligible TRSL retirees, beneficiaries and survivors calculated on the first \$68,396 of their annual benefit.

Act 95 of 2016 provides that the net remaining liability of the OAB and EAAB shall be re-amortized after application of the hurdle payments in the Fiscal Year 2024/2025 and in every fifth fiscal year thereafter until the system is 80% funded.

ACCELERATED REDUCTION OF OAB AND EAAB

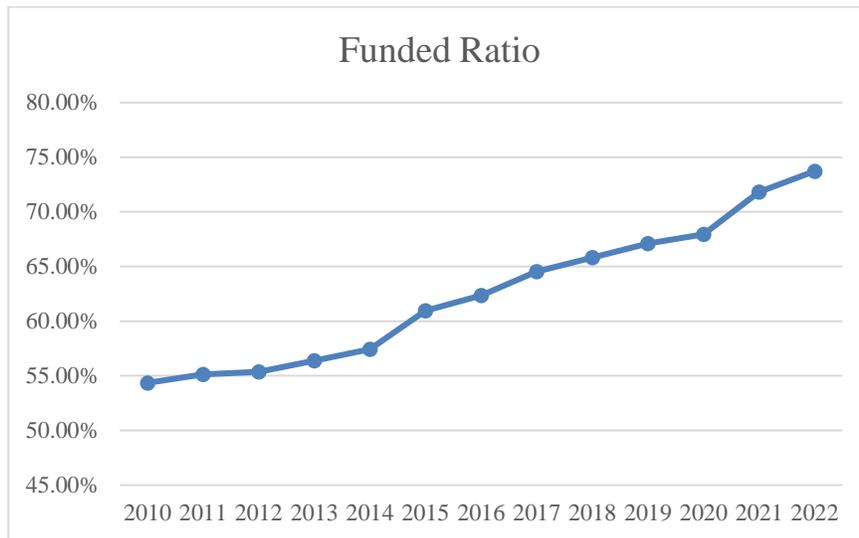
Act 497 of 2009 established the OAB and EAAB and required the application of certain investment gains and contribution variance credits to these schedules. Act 399 of 2014 modified the provisions of Act 497 and specifies that until the System's funded ratio reaches 85%, the funds applied to these schedules will be used to pay off the schedules early, rather than to reduce employer contributions. Since 2009, \$755,260,743 has been applied to the OAB and \$1,416,192,808 has been applied to the EAAB. Per Act 95 of 2016, the OAB and EAAB schedules were re-amortized to their original statutorily required pay-off dates in FY 2019/2020 and the OAB was re-amortized again on June 30, 2021 to 2029 with level payments. A projection of future UAL balances and UAL payments based on the projected amortization schedules is shown in Appendix F. This projection assumes that the actuarially determined contributions will be paid when due and all actuarial assumptions will be realized.

FUNDED STATUS

The funded status measure is appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan’s obligations and for assessing the amount of future contributions. The current funded ratio is 73.7%, as measured by the plan’s valuation assets divided by the total actuarial accrued liability, which are based on the asset valuation method, actuarial cost method, and actuarial assumptions described in Appendix E. This measure would be different if the measure reflected the market value of assets rather than the actuarial value of assets. The financial crisis of 2008, and gradual recognition of the losses, resulted in a funded ratio of 54.4% in 2010. The chart below shows the recovery to date as exhibited by the steady increase in the funded ratio through June 30, 2022.

If not for the reductions in the discount rate over this period and change to the Entry Age Normal cost method, the funded ratio would have increased to approximately 81.6%. However, these changes have improved the financial stability of the plan by reducing the potential for future contribution rate increases.

If all actuarial assumptions are realized, the funded ratio is expected to steadily increase as unfunded liabilities are amortized in accordance with the plan’s funding policy.



ASSETS/FINANCIAL SUMMARY
STATEMENT OF REVENUES AND EXPENSES

	----- Prior Years -----		
	June 30, 2022	June 30, 2021	June 30, 2020
<u>OPERATING REVENUES:</u>			
1. Contribution Income			
Member	\$ 378,065,213	\$ 361,684,671	\$ 351,287,975
Employer	1,179,985,424	1,152,627,868	1,129,963,855
Legis Appropriations	48,092,612	18,612,744	36,789,397
Other Appropriations	26,225	25,099	25,399
ORP - Unfunded	132,629,323	131,768,231	134,957,347
LSU Ag Center Coop. Ext.	1,987,638	2,075,689	2,017,909
Miscellaneous	(1,318,473)	(1,557,967)	1,013,941
TOTAL CONTRIBUTIONS	1,739,467,962	1,665,236,335	1,656,055,823
2. Investment Income			
Investments	-1,998,554,534	7,204,116,772	209,737,077
Less Advisor Fees	(42,390,847)	(38,755,431)	(35,726,244)
TOTAL INVESTMENT INCOME	-2,040,945,381	7,165,361,341	174,010,833
3. Total Revenues	-301,477,419	8,830,597,676	1,830,066,656
<u>OPERATING EXPENSES:</u>			
1. General Administration	14,554,420	14,132,424	14,418,013
Other Post-Employment Benefits	632,234	(385,301)	-540,170
GASB 68 Pension Expense	758,208	1,870,195	1,576,153
Depreciation Expense	494,877	470,446	422,685
TOTAL ADMIN. EXPENSE	16,439,739	16,087,764	15,876,681
2. Benefits Paid			
Pension Benefits	2,303,868,400	2,256,015,333	2,193,873,471
LSU Ag Center Coop. Ext.	1,739,624	1,856,703	1,987,638
Refund of Contributions	49,729,953	53,095,624	50,225,236
TOTAL BENEFITS PAID	2,355,337,977	2,310,967,660	2,246,086,345
3. Total Expenses	2,371,777,716	2,327,055,424	2,261,963,026
<u>MARKET VALUE CHANGE:</u>	\$ (2,673,255,135)	\$ 6,503,542,252	\$ (431,896,370)

**COMPARATIVE SUMMARY OF REVENUES BY SOURCE
AND EXPENSES BY TYPE**

Revenues by Source				
Fiscal Year	Members Contribution	Employer Contribution ^{1,3}	Investment Income	Total
2013	327,767,936	1,095,482,766	1,754,983,691	3,178,234,393
2014	326,007,091	1,218,017,295 ²	2,818,063,134	4,362,087,520
2015	324,920,644	1,267,129,097	445,160,167	2,037,209,908
2016	330,773,315	1,197,925,446	180,592,209	1,709,290,970
2017	328,541,240	1,162,795,385	2,615,507,755	4,106,844,380
2018	337,928,752	1,251,838,141	2,140,697,973	3,730,464,866
2019	341,398,896	1,281,339,607	1,213,922,169	2,836,660,672
2020	351,287,975	1,304,767,848	174,010,833	1,830,066,656
2021	361,684,671	1,303,551,664	7,165,361,341	8,830,597,676
2022	378,065,213	1,361,402,749	(2,040,945,381)	(301,477,419)

Expenses by Type				
Fiscal Year	Benefits ³	Refunds	Administrative Expenses	Total
2013	1,800,166,804	59,152,481	17,661,969	1,876,981,254
2014	1,877,113,902	57,652,124	17,522,895	1,952,288,921
2015	1,956,857,437	51,545,762	19,265,221	2,027,668,420
2016	2,001,145,698	49,141,575	17,432,419	2,067,719,692
2017	2,063,449,370	49,805,920	18,194,370	2,131,449,660
2018	2,118,971,446	48,671,220	29,465,710	2,197,108,376
2019	2,165,760,383	50,301,709	14,818,373	2,230,880,465
2020	2,195,861,109	50,225,236	15,876,681	2,261,963,026
2021	2,257,872,036 ⁴	53,095,624	16,087,764	2,327,055,424
2022	2,305,608,024	49,729,953	16,439,739	2,371,777,716

¹ Includes Miscellaneous Contribution/Income in addition to direct employer contributions.

² Includes \$5,578,791 legislative appropriation from Act 55 of 2014.

³ Includes LSU Ag Center Employer Contributions and Benefits.

⁴ The value for 2021 Benefits changed from the amount provided in the 2021 report due to a correction.

STATEMENT OF ASSETS

ASSETS:	June 30, 2022	----Prior Years---	
		June 30, 2021	June 30, 2020
1. Short-term Assets			
Cash and Cash Equivalents	\$ 287,758,424	\$ 246,399,879	\$ 239,806,968
Short Term Securities	1,020,749,502	1,073,305,658	869,649,603
2. Global Debt	2,800,253,489	3,368,747,664	3,579,000,756
3. Global Equities	8,878,055,972	12,274,373,322	9,140,896,138
4. Other Assets			
Alternative Investments	11,794,416,139	10,795,084,608	7,725,680,541
Property and Equipment	3,762,992	3,756,028	3,582,219
Receivables less Payables	263,242,976	(41,800,034)	(337,194,283)
Deferred Outflows less Deferred Inflows	2,633,626	4,261,131	(835,940)
TOTAL ASSETS - Market Value	\$ 25,050,873,120	\$ 27,724,128,255	\$ 21,220,586,002

Totals may not add due to rounding.

ACTUARIAL VALUE OF ASSETS

The actuarial value of assets (AVA) is determined as the market value of assets (MVA) adjusted to gradually recognize investment gains and losses relative to the net assumed investment return, over a five-year period in 20% increments. The actuarial value of assets is subject to Corridor Limits of 80% to 120% of the Market Value of Assets. The tables below show the development of the actuarial value of assets and the amount of deferred gains and losses to be recognized in future years.

Plan Year	Asset G/L	Deferred %	Deferred \$
2019	(372,073,354)	20%	(74,414,671)
2020	(1,436,489,787)	40%	(574,595,915)
2021	5,609,773,769	60%	3,365,864,261
2022	(4,067,355,984)	80%	(3,253,884,787)
			\$ (537,031,112)
Market Value of Assets			\$ 25,050,873,120
- Deferred Asset G/L			(537,031,112)
Preliminary Actuarial Value of Assets			\$ 25,587,904,232
CORRIDOR LIMITS			
Minimum = 80% of Market Value			\$ 20,040,698,496
Maximum = 120% of Market Value			30,061,047,744
Actuarial Value of Assets			\$ 25,587,904,232

Deferred Gain/(Loss) to be Recognized in Actuarial Value of Assets in Future Years

Plan Year	Deferred Gain/(Loss)	2023	2024	2025	2026
2019	(74,414,671)	(74,414,671)			
2020	(574,595,915)	(287,297,957)	(287,297,958)		
2021	3,365,864,261	1,121,954,754	1,121,954,754	1,121,954,753	
2022	(3,253,884,787)	(813,471,197)	(813,471,197)	(813,471,197)	(813,471,196)
	(537,031,112)	(53,229,071)	21,185,599	308,483,556	(813,471,196)

**SIDE ACCOUNTS AND
DEVELOPMENT OF VALUATION ASSETS**

---- Prior Years ----

	June 30, 2022	June 30, 2021	June 30, 2020
EMPLOYER CREDIT ACCOUNT¹:			
Prior Year Ending Balance	\$ -	\$ -	\$ -
+ Contributions	-	-	-
- Disbursements	-	-	-
+ Accumulated Interest	-	-	-
Account Balance - Year End	-	-	-
LSU AG/EXT SERVICE:			
Prior Year Ending Balance	\$ 4,072,820	\$ 3,289,245	\$ 2,985,411
+ Contributions	1,987,638	2,075,689	2,017,909
- Benefit Disbursements	1,739,624	1,856,703	1,987,638
+ Accumulated Interest	466,867	564,589	273,563
Account Balance - Year End	4,787,701	4,072,820	3,289,245
EXPERIENCE ACCOUNT FUND:			
Prior Year Ending Balance	\$ 369,000,000	\$ 97,714,607	\$ 91,497,197
+ Experience Account Allocation	30,502,699	265,864,686	-
- Benefit Disbursements	353,117,800	6,937,251	-
+ Accumulated Interest	33,070,423	12,357,958	6,217,410
Fund Balance - Year End	79,455,322	369,000,000	97,714,607
DEVELOPMENT OF VALUATION ASSETS:			
Actuarial Value of Assets	\$ 25,587,904,232	\$ 24,114,655,748	\$ 22,072,044,244
- Employer Credit Account	-	-	-
- LSU Ag/Ext Service Account	4,787,701	4,072,820	3,289,245
- Experience Account Fund	79,455,322	369,000,000	97,714,607
Val Valuation Assets	25,503,661,209	23,741,582,928	21,971,040,392

¹ The Employer Credit Account was created by ACT 588 of 2004.

**DEVELOPMENT OF COSTS,
LIABILITIES AND CONTRIBUTIONS**

Normal Costs and Accrued Liabilities are calculated in accordance with the Entry Age Normal cost method, based on the Provisions of the Plan as summarized in Appendix B and the Actuarial Methods and Assumptions outlined in Appendix E.

	June 30, 2022		---- Prior Year ---- June 30, 2021	
	<u>Dollar Amount</u>	<u>% of Salary</u>	<u>Dollar Amount</u>	<u>% of Salary</u>
Discount Rate	7.25%		7.40%	
I. Normal Costs				
Active Members				
a) Retirement Benefits	\$ 294,658,128	6.49%	\$ 275,442,967	6.35%
b) Disability Benefits	17,064,177	0.38%	15,952,286	0.37%
c) Survivor Benefits	6,774,747	0.15%	6,345,805	0.15%
d) Voluntary Termination	200,076,197	4.41%	184,749,636	4.26%
e) Total	<u>518,573,249</u>	11.42%	<u>482,490,694</u>	11.13%
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement Benefits	\$ 8,848,522,959		\$ 8,374,588,534	
2) Disability Benefits	216,216,437		202,007,601	
3) Survivor Benefits	88,956,781		83,988,558	
4) Voluntary Termination	879,947,489		755,906,098	
	<u>10,033,643,666</u>		<u>9,416,490,791</u>	
b) Retired and Inactive Members				
1) Regular Retirees	\$ 19,065,031,049		\$ 18,305,744,624	
2) Disability Benefits	486,394,793		475,820,491	
3) Survivors	1,433,699,979		1,338,227,031	
4) Vested Deferred ¹	537,084,048		478,670,699	
5) Contributions Refunded ²	153,664,375		136,698,682	
6) DROP Deferred Benefits	1,779,104,018		1,792,382,656	
7) DROP Account Balances	1,104,739,831		1,114,791,884	
	<u>24,559,718,093</u>		<u>23,642,336,067</u>	
c) Total	34,593,361,759		33,058,826,858	

¹ Includes pending Retirement/DROP applications.

² Includes terminated employee and rehired retiree contributions to be refunded.

Section III
DEVELOPMENT OF COSTS, LIABILITIES, AND CONTRIBUTIONS

TRSL Actuarial Valuation
June 30, 2022

	June 30, 2022	---- Prior Year ---- June 30, 2021
II. Actuarial Accrued Liability	34,593,361,759	33,058,826,858
Discount Rate	7.25%	7.40%
III. Valuation Assets	25,503,661,209	23,741,582,928
IV. Unfunded Actuarial Accrued Liability	9,089,700,550	9,317,243,930
a) Change over prior year	(227,543,380)	(1,052,753,991)
b) Funded Percentage	73.7%	71.8%
V. Employer Contributions		
To Fund Current Plan Year ¹		
a) Employer Portion of Normal Cost	157,245,549	137,467,163
b) Administrative Expenses	17,000,000	16,500,000
c) Amortization Payments	1,057,196,433	1,007,292,858
d) Prior Contribution Variance	0	0
Total Required Contribution	<u>1,231,441,982</u>	<u>1,161,260,021</u>
Total Contribution Rate	24.2%	23.9%
PR SAC Approved rate ¹	24.7%	25.1%
Aggregate Employer Normal Cost Rate	3.4357%	3.1473%
VI. Projected Employer Contributions		
Discount Rate	7.25%	7.25%
To Fund Next Plan Year ¹		
a) Employer Portion of Normal Cost	159,348,458	155,302,581
b) Administrative Expenses	17,000,000	16,500,000
c) Amortization Payments	1,057,196,433	1,043,951,405
c) Prior Contribution Variance	0	0
Total Required Contribution	<u>1,233,544,891</u>	<u>1,215,753,986</u>
Total Contribution Rate	24.0%	24.7%
Projected Aggregate Employer Normal Cost Rate	3.4357%	3.5104%
VII. Current Payroll	4,541,421,889	4,335,090,648
Projected Payroll - Mid Year	4,576,767,126	4,367,724,091
Projected Payroll - Next Year	4,637,974,093	4,424,019,346
Optional Retirement Plan (ORP) Salary Adjustment Factor ²	1.13089	1.13436

¹ Dollar Amounts reflect estimated payments due mid-year on January 1st per Act 81. Constitutional Minimum is 11.8% without regard to the statutory minimum of 15.5%.

² Amortization payments are paid as a percentage of plan member and ORP payroll. The ORP salary adjustment factor is used to convert amortization payments to percentage of payroll.

GASB STATEMENT NO. 67/68 REPORTING

The Governmental Accounting Standards Board Statements No. 67/68 establish financial reporting standards for state and local governmental pension plans and their plan sponsors that are administered through trusts or equivalent arrangements. The required actuarial disclosures are illustrated below. The Plan Fiduciary Net Position is the Market Value of Assets used for the funding valuation, excluding assets held for the LSU Agriculture and Extension Service. The Total Pension Liability was developed using the Entry Age Normal cost method.

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY

	<u>June 30, 2022</u>	<u>June 30, 2021</u>	<u>June 30, 2020</u>
Total Pension Liability	\$ 34,593,361,759	\$ 33,058,826,858	\$ 32,340,867,066
Plan Fiduciary Net Position ¹	25,046,085,419	27,720,055,435	21,217,296,757
Employers' Net Pension Liability	\$ 9,547,276,340	\$ 5,338,771,423	\$ 11,123,570,309
Plan Fiduciary Net Position as a percentage of Total Pension Liability	72.4%	83.9%	65.6%
Covered Employee Payroll	\$ 4,541,421,889	\$ 4,335,090,648	\$ 4,229,620,981
Net Pension Liability as a percentage of Covered Payroll	210.2%	123.2%	263.0%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year	Actuarial Determined Contribution	Contributions in Relation to Actuarial Determined Contribution	Contribution Deficiency (Excess) ²	Covered Payroll	Contributions as a % of Covered Payroll
2013	1,149,134,132	1,137,733,532	11,400,600	3,726,325,750	30.5%
2014	1,218,397,771	1,258,687,418	(40,289,647)	3,764,954,727	33.4%
2015	1,212,285,929	1,303,570,582	(91,284,653)	3,815,648,662	34.2%
2016	1,177,993,580	1,242,445,786	(64,452,206)	3,869,730,024	32.1%
2017	1,188,962,275	1,204,634,319	(15,672,044)	3,901,627,792	30.9%
2018	1,227,397,115	1,288,863,851	(61,466,736)	3,998,051,313	32.2%
2019	1,246,577,897	1,306,003,522	(59,425,625)	4,071,754,355	32.1%
2020	1,221,266,156	1,313,932,563	(92,666,407)	4,229,620,981	31.1%
2021	1,243,818,612	1,328,176,588	(84,357,976)	4,335,090,648	30.6%
2022	1,213,461,726	1,357,609,195	(144,147,469)	4,541,421,889	29.9%

¹ Plan Fiduciary Net Position excludes side-fund assets held for the LSU Agriculture and Extension Service

² See Appendix D for an explanation of the Contribution Deficiency/(Excess)

**SCHEDULE OF CHANGES IN
EMPLOYERS' NET PENSION LIABILITY**

	<u>June 30, 2022</u>	<u>June 30, 2021</u>	<u>June 30, 2020</u>
Total Pension Liability			
Service Cost	\$ 482,490,694	\$ 468,547,375	\$ 454,344,240
Interest	2,394,974,360	2,358,286,993	2,333,436,352
Changes of Benefit Terms	353,117,800	6,937,251	-
Diff. Between Expected and Actual	159,411,123	34,084,245	(2,565,994)
Changes of Assumptions	498,139,277	159,214,885	225,604,318
Retirement Benefits ¹	(2,303,868,400)	(2,256,015,333)	(2,193,873,471)
Refunds/Transfers of Member Contributions	(49,729,953)	(53,095,624)	(50,225,236)
Net Change in Total Pension Liability	<u>1,534,534,901</u>	<u>717,959,792</u>	<u>766,720,209</u>
Total Pension Liability - Beginning	<u>33,058,826,858</u>	<u>32,340,867,066</u>	<u>31,574,146,857</u>
Total Pension Liability - Ending (a)	<u>\$ 34,593,361,759</u>	<u>\$ 33,058,826,858</u>	<u>\$ 32,340,867,066</u>
Plan Fiduciary Net Position			
Employer Contributions ¹	1,266,088,182	1,239,712,158	1,222,809,468
Non-Employer Contributions	45,234,317	43,151,074	43,151,074
Employee Contributions	378,065,213	361,684,671	351,287,976
Net Investment Income ¹	(2,043,179,975)	7,163,605,200	170,755,803
Other Income	49,860,339	19,804,296	39,770,864
Retirement Benefits ¹	(2,303,868,400)	(2,256,015,333)	(2,193,873,471)
Refunds/Transfers of Member Contributions	(49,729,953)	(53,095,624)	(50,225,236)
Administrative Expense	(15,312,628)	(16,002,619)	(15,994,167)
Other Postemployment Benefit Expenses	(632,234)	385,301	540,170
Depreciation and Amortization Expenses	(494,877)	(470,446)	(422,685)
Net Change in Plan Fiduciary Net Position	<u>(2,673,970,016)</u>	<u>6,502,758,678</u>	<u>(432,200,204)</u>
Plan Fiduciary Net Position - Beginning	<u>27,720,055,435</u>	<u>21,217,296,757</u>	<u>21,649,496,961</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 25,046,085,419</u>	<u>\$ 27,720,055,435</u>	<u>\$ 21,217,296,757</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 9,547,276,340</u>	<u>\$ 5,338,771,423</u>	<u>\$ 11,123,570,309</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	72.4%	83.9%	65.6%
Covered Employee Payroll	\$ 4,541,421,889	\$ 4,335,090,648	\$ 4,229,620,981
Net Pension Liability as a Percentage of Covered Employee Payroll	210.2%	123.2%	263.0%

¹ Amounts shown exclude side-fund assets, contributions, and benefits for the LSU Agriculture and Extension Service.

Actuarial Assumptions:

All assumptions used for purposes of GASB Statement 67/68 reporting requirements are described in Appendix D. Administrative expenses will be directly reflected in the employer pension expense in the year incurred in the Statement 67/68 reporting, rather than with an explicit reduction in the discount rate. A description of the discount rate used for GASB Statement 67/68 reporting is provided below.

Discount Rate:

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, and by adding expected inflation and an adjustment for the effect of rebalancing/diversification. The resulting long-term geometric nominal expected return is 8.32%. Best estimates of long-term real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2022, are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	4.15%
International Equity	5.16%
Domestic Fixed Income	0.85%
International Fixed Income	-0.10%
Private Equity	8.15%
Other Private Assets	3.72%

The discount rate used to measure the total pension liability is 7.25 percent.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate:

The following presents the net pension liability calculated using the discount rate of 7.25%, and what the net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher.

	1% Decrease	Current Discount Rate	1% Increase
Employers' Net Pension Liability	6.25% \$13,111,690,284	7.25% \$9,547,276,340	8.25% \$6,310,697,462

The Schedule of Pension Amounts, that follows, provides employers with amounts to be recognized in the financial statements and note disclosures for GASB 68 reporting. In accordance with GASB Statement 68, changes in total pension liability due to differences between actual and expected experience and changes in assumptions are amortized over a period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees) determined as of the beginning of the measurement period. The current average remaining service life, when rounded up to the next higher whole number, remains at 5 years. Differences between projected and actual investment returns are amortized over a closed 5-year period.

SCHEDULE OF PENSION AMOUNTS

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	(5,338,771,423)	(4,699,135,145)	1,561,541,115	
Total Pension Liability Factors:				
Service cost	(482,490,694)			482,490,694
Interest	(2,394,974,360)			2,394,974,360
Changes in benefit terms	(353,117,800)			353,117,800
Differences between expected and actual experience	(159,411,123)	-	159,411,123	
Amortization of current year		-	(31,882,225)	31,882,225
Amortization of prior years		53,192,028	(6,816,849)	(46,375,179)
Changes in assumptions	(498,139,277)	-	498,139,277	
Amortization of current year		-	(99,627,855)	99,627,855
Amortization of prior years		-	(274,241,466)	274,241,466
Benefit payments	2,303,868,400			
Refunds/Transfers of Member Contributions	49,729,953			
Net Change in Total Pension Liability	(1,534,534,901)	53,192,028	244,982,005	3,589,959,221
Plan Fiduciary Net Position:				
Contributions - Employer	1,266,088,182			
Contributions - Non-Empl. Contributing Entities	45,234,317			
Contributions - Employees	378,065,213			(378,065,213)
Expected earnings on pension plan investments	2,026,165,444			(2,026,165,444)
Diff. between projected and actual investment earnings	(4,069,345,419)	-	4,069,345,419	
Amortization of current year		-	(813,869,084)	813,869,084
Amortization of prior years		1,253,473,869	(363,329,254)	(890,144,615)
Retirement Benefits	(2,303,868,400)			
Administrative Expense	(15,944,862)			15,944,862
Refunds/Transfers of Member Contributions	(49,729,953)			
Adjusting Entry	-			-
Other	49,365,462			(49,365,462)
Net Change in Plan Fiduciary Net Position	(2,673,970,016)	1,253,473,869	2,892,147,081	(2,513,926,788)
Ending Balance	(9,547,276,340)	(3,392,469,248)	4,698,670,201	1,076,032,433

MEMBERSHIP DATA

TRSL provides the data for individual members of the system as of the valuation date. The validity of the results of any actuarial valuation is dependent upon the accuracy of the data provided. Our review of submitted data is limited to validation of reasonableness and consistency in several areas, such as age, service, salary, and current benefits. Our review includes checks for duplicate records and a comparison of the current year records to those submitted in prior years. Records identified as containing suspicious data were assigned values based on information from similar records or based on historical averages for similarly situated members. Suspicious data are not necessarily errors, but data which fall outside the normal parameters. Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information.

The data contained in this valuation is summarized on the following pages. The data summarized in the tables that follow serve as the basis for determining costs and liabilities. Salary data contained in the profiles and valuation report exceed the amount reported by internal audit for members with less than one year of service. In the valuation process, salaries are annualized for members with fractional service in the first year of employment. Disability retirees who have reached normal retirement eligibility requirements are considered regular retirees by TRSL but are classified as disability retirees for purposes of the actuarial valuation. Liabilities are calculated accordingly.

Active Members	2022		2021	
	Members	Avg. Salary	Members	Avg. Salary
Regular Teachers	71,856	\$ 50,210	71,724	\$ 48,223
Higher Education	11,543	68,381	11,127	65,916
Lunch Plan A	1	32,340	1	35,585
Lunch Plan B	1,059	23,677	1,097	22,366
Subtotal Actives	84,459	52,361	83,949	50,230
Post DROP	1,905	59,893	2,031	57,117
Total Active	86,364	52,527	85,980	50,393

Retired and Inactive Members	2022	2021
	Members	Members
Regular Retirees	70,075	69,297
Disability Retirees	3,982	4,060
Survivors	8,543	8,263
DROP Participants	2,172	2,227
Terminated Vested	9,245	8,409
Inactive Non-Vested (Due Refunds)	27,722	25,641
Total Retired and Inactive	121,739	117,897
Total Members	208,103	203,877
Less Inactive Non-Vested (Due Refunds)	-27,722	-25,641
Total Active and Vested Inactive	180,381	178,236

ACTIVE MEMBERS

	Pre-DROP	Post-DROP	Total
Non-Vested	29,050		29,050
Vested	55,409	1,905	57,314
	84,459	1,905	86,364

MEMBER RECONCILIATION

	Active (Pre- DROP)	Active after DROP	Terminated Vested	In DROP	Retired, Disabled, Survivor	Total
June 20, 2021	83,949	2,031	8,409	2,227	81,620	178,236
Additions to Census						
Newly Hired Members	9,615					9,615
Change in Status						
New Regular Retirees	(1,722)				1,722	0
New Disability Retirees	(93)				93	0
New Survivors	(36)				36	0
Active to Terminated Vested	(2,022)		2,022			0
Active to DROP	(823)			823		0
Terminated Vested to Active	525		(525)			0
Terminated Vested to Ret/Srv			(263)		263	0
Disability to Active/TV	3		1		(4)	0
DROP to Active After DROP		346		(346)		0
Act aft DROP to Ret/Srv		(469)			469	0
Terminated Vested to DROP			(3)	3		0
DROP to Ret/Srv				(523)	523	0
Eliminated from Census						
Refunded or Due Refund	(4,866)		(387)		(1)	(5,254)
Deceased	(47)	(7)	(32)	(5)	(2,209)	(2,300)
Data Revisions	(24)	4	23	(7)	88	84
June 20, 2022	84,459	1,905	9,245	2,172	82,600	180,381

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
ALL ACTIVE MEMBERS (PRE-DROP)

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 25	1,028 \$46,524,965	1,181 \$52,545,664	4 \$106,840							2,213 \$99,177,469
25 - 29	1,395 \$64,260,528	4,766 \$221,588,093	1,188 \$60,407,090							7,349 \$346,255,711
30 - 34	1,095 \$50,139,849	3,665 \$167,402,361	4,195 \$219,139,498	747 \$41,911,135						9,702 \$478,592,843
35 - 39	1,012 \$47,164,257	3,270 \$150,143,857	3,311 \$172,807,086	3,101 \$180,261,019	987 \$60,527,751					11,681 \$610,903,970
40 - 44	782 \$37,495,705	2,737 \$122,539,326	2,789 \$142,296,589	2,357 \$134,723,201	3,392 \$208,911,245	944 \$61,488,312	2 \$64,498			13,003 \$707,518,876
45 - 49	548 \$26,624,927	2,065 \$93,005,553	2,187 \$109,337,183	1,805 \$101,113,091	2,268 \$133,931,379	2,798 \$186,494,279	678 \$46,904,707			12,349 \$697,411,119
50 - 54	521 \$24,957,263	1,639 \$75,296,369	1,756 \$83,584,576	1,651 \$84,867,074	1,953 \$106,188,172	2,006 \$124,202,483	2,341 \$161,651,414	102 \$8,599,281		11,969 \$669,346,632
55 - 59	343 \$14,422,185	1,310 \$57,121,170	1,323 \$59,677,542	1,253 \$62,944,790	1,611 \$80,265,646	1,439 \$77,808,958	372 \$22,926,646	141 \$10,902,144	28 \$2,069,892	7,820 \$388,138,973
60 - 64	226 \$10,144,418	834 \$36,215,170	887 \$40,779,449	736 \$37,035,314	872 \$42,611,265	912 \$47,456,693	367 \$19,341,095	105 \$6,481,334	63 \$4,735,479	5,002 \$244,800,217
65 - 69	88 \$3,945,485	332 \$16,062,023	360 \$17,407,716	310 \$15,682,777	391 \$21,035,793	307 \$15,338,750	270 \$14,209,712	108 \$6,375,197	76 \$7,320,794	2,242 \$117,378,247
70+	46 \$1,701,558	167 \$6,732,331	159 \$7,560,956	157 \$8,041,868	175 \$9,648,357	115 \$6,782,959	102 \$5,553,293	74 \$4,445,481	134 \$12,337,707	1,129 \$62,804,510
Total	7,084 \$327,381,139	21,966 \$998,651,917	18,159 \$913,104,525	12,117 \$666,580,269	11,649 \$663,119,608	8,521 \$519,572,434	4,132 \$270,651,365	530 \$36,803,437	301 \$26,463,872	84,459 \$4,422,328,566

AVERAGES --- Attained Age 44.60
Service Years 10.46
Active Salary \$52,361

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
ACTIVE - REGULAR K-12

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 25	791 \$35,417,778	1,077 \$48,309,828	4 \$106,840							1,872 \$83,834,446
25 - 29	1,022 \$44,887,546	4,202 \$196,634,255	1,113 \$56,708,809							6,337 \$298,230,610
30 - 34	803 \$33,096,203	2,974 \$129,299,704	3,809 \$197,165,228	710 \$39,643,176						8,296 \$399,204,311
35 - 39	755 \$30,629,387	2,580 \$106,969,846	2,780 \$138,406,285	2,847 \$163,580,763	944 \$57,707,798					9,906 \$497,294,079
40 - 44	594 \$25,170,751	2,146 \$86,858,877	2,315 \$108,982,382	2,025 \$111,830,020	3,141 \$191,225,068	911 \$59,090,731	2 \$64,498			11,134 \$583,222,327
45 - 49	400 \$17,309,151	1,656 \$68,926,446	1,822 \$83,822,693	1,569 \$83,681,470	2,022 \$115,829,071	2,692 \$177,885,930	665 \$45,906,404			10,826 \$593,361,165
50 - 54	377 \$15,210,443	1,298 \$52,491,471	1,468 \$65,739,709	1,417 \$68,643,276	1,719 \$89,323,151	1,872 \$113,499,564	2,246 \$153,900,592	93 \$7,769,321		10,490 \$566,577,527
55 - 59	255 \$9,493,656	1,000 \$37,563,553	1,058 \$43,138,196	1,037 \$47,954,898	1,385 \$65,136,226	1,308 \$68,899,781	306 \$18,473,550	127 \$9,602,317	24 \$1,605,217	6,500 \$301,867,394
60 - 64	163 \$6,247,413	599 \$21,484,484	673 \$25,761,000	560 \$25,129,763	728 \$31,699,826	815 \$40,276,071	323 \$15,864,228	87 \$5,143,318	53 \$3,937,166	4,001 \$175,543,269
65 - 69	65 \$2,395,318	236 \$8,414,909	258 \$9,918,994	226 \$9,188,113	308 \$14,421,035	273 \$12,944,496	243 \$12,209,698	86 \$4,480,122	37 \$2,741,246	1,732 \$76,713,931
70+	33 \$957,966	124 \$4,394,679	106 \$3,883,624	109 \$4,571,071	120 \$4,877,352	76 \$3,524,604	81 \$4,211,054	55 \$2,655,622	58 \$2,974,093	762 \$32,050,065
Total	5,258 \$220,815,610	17,892 \$761,348,052	15,406 \$733,633,760	10,500 \$554,222,550	10,367 \$570,219,527	7,947 \$476,121,177	3,866 \$250,630,024	448 \$29,650,700	172 \$11,257,722	71,856 \$3,607,899,122

AVERAGES --- Attained Age 44.39
Service Years 10.88
Active Salary \$50,210

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
ACTIVE - HIGHER EDUCATION

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 25	227 \$10,877,777	97 \$4,091,995								324 \$14,969,772
25 - 29	358 \$19,021,835	552 \$24,748,215	70 \$3,597,361							980 \$47,367,411
30 - 34	275 \$16,640,495	667 \$37,624,719	378 \$21,785,575	37 \$2,267,959						1,357 \$78,318,748
35 - 39	240 \$16,109,424	654 \$42,374,568	511 \$33,775,383	247 \$16,482,523	42 \$2,798,981					1,694 \$111,540,879
40 - 44	173 \$11,949,553	540 \$34,506,937	449 \$32,747,944	320 \$22,558,846	246 \$17,571,741	31 \$2,294,011				1,759 \$121,629,032
45 - 49	134 \$9,017,388	362 \$23,106,138	339 \$24,901,430	222 \$17,065,566	234 \$17,796,173	105 \$8,582,049	11 \$952,401			1,407 \$101,421,145
50 - 54	133 \$9,510,692	296 \$21,829,896	251 \$16,943,554	206 \$15,594,756	205 \$16,072,892	122 \$10,349,835	93 \$7,681,808	9 \$829,960		1,315 \$98,813,393
55 - 59	68 \$4,446,159	260 \$18,552,947	211 \$15,293,066	179 \$14,108,330	181 \$14,020,959	94 \$7,952,251	43 \$3,784,120	14 \$1,299,827	3 \$430,492	1,053 \$79,888,151
60 - 64	52 \$3,615,468	193 \$13,878,019	177 \$14,038,962	153 \$11,404,041	132 \$10,619,132	85 \$6,863,674	37 \$3,264,056	17 \$1,315,088	9 \$768,605	855 \$65,767,045
65 - 69	18 \$1,383,744	81 \$7,310,563	88 \$7,190,835	75 \$6,288,069	80 \$6,534,325	31 \$2,320,459	26 \$1,976,166	22 \$1,895,075	38 \$4,547,208	459 \$39,446,444
70+	11 \$696,393	36 \$2,190,346	46 \$3,522,270	43 \$3,358,985	53 \$4,735,334	37 \$3,203,776	20 \$1,320,802	19 \$1,789,859	75 \$9,343,895	340 \$30,161,660
Total	1,689 \$103,268,927	3,738 \$230,214,343	2,520 \$173,796,380	1,482 \$109,129,075	1,173 \$90,149,537	505 \$41,566,055	230 \$18,979,353	81 \$7,129,809	125 \$15,090,200	11,543 \$789,323,679

AVERAGES --- Attained Age 45.27
Service Years 8.04
Active Salary \$68,381

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
ACTIVE - LUNCH PLAN A

CELLS DEPICT -

MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44										
45 - 49										
50 - 54										
55 - 59										
60 - 64										
65 - 69									1 \$32,340	1 \$32,340
70+										
Total									1 \$32,340	1 \$32,340

AVERAGES --- Attained Age 66.4
Service Years 43.5
Active Salary \$32,340

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
ACTIVE - LUNCH PLAN B

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 25	10 \$229,410	7 \$143,841								17 \$373,251
25 - 29	15 \$351,148	12 \$205,623	5 \$100,920							32 \$657,691
30 - 34	17 \$403,152	24 \$477,938	8 \$188,695							49 \$1,069,785
35 - 39	17 \$425,446	36 \$799,443	20 \$625,418	7 \$197,733	1 \$20,972					81 \$2,069,012
40 - 44	15 \$375,401	51 \$1,173,512	25 \$566,263	12 \$334,335	5 \$114,436	2 \$103,570				110 \$2,667,517
45 - 49	14 \$298,388	47 \$972,969	26 \$613,060	14 \$366,055	12 \$306,135	1 \$26,300	2 \$45,902			116 \$2,628,809
50 - 54	11 \$236,128	45 \$975,002	37 \$901,313	28 \$629,042	29 \$792,129	12 \$353,084	2 \$69,014			164 \$3,955,712
55 - 59	20 \$482,371	50 \$1,004,670	54 \$1,246,280	37 \$881,562	45 \$1,108,461	37 \$956,926	23 \$668,976		1 \$34,183	267 \$6,383,429
60 - 64	11 \$281,537	42 \$852,667	37 \$979,487	23 \$501,510	12 \$292,307	12 \$316,948	7 \$212,811	1 \$22,928	1 \$29,708	146 \$3,489,903
65 - 69	5 \$166,423	15 \$336,551	14 \$297,887	9 \$206,595	3 \$80,433	3 \$73,795	1 \$23,848			50 \$1,185,532
70+	2 \$47,200	7 \$147,306	7 \$155,062	5 \$111,812	2 \$35,671	2 \$54,579	1 \$21,437		1 \$19,719	27 \$592,786
Total	137 \$3,296,603	336 \$7,089,522	233 \$5,674,385	135 \$3,228,644	109 \$2,750,544	69 \$1,885,202	36 \$1,041,988	1 \$22,928	3 \$83,610	1,059 \$25,073,426

AVERAGES --- Attained Age 51.52
Service Years 8.47
Active Salary \$23,677

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
DROP PARTICIPANTS

CELLS DEPICT -

MEMBER COUNT
TOTAL BENEFITS

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 15	15 - 20	20+	Total
< 40										
40 - 44										
45 - 49		1 \$24,312								1 \$24,312
50 - 54	236 \$10,232,652	142 \$6,612,936	76 \$3,368,892	2 \$111,564						456 \$20,326,044
55 - 59	448 \$16,945,487	444 \$17,172,496	430 \$17,230,660	19 \$983,544						1,341 \$52,332,187
60 - 64	96 \$2,671,035	128 \$3,431,432	132 \$3,211,368	7 \$290,568						363 \$9,604,403
65 - 69	1 \$3,408	4 \$14,184	4 \$25,536							9 \$43,128
70 - 74	1 \$2,532	1 \$6,540								2 \$9,072
75 - 79										
80 - 84										
85 - 89										
90+										
Total	782 \$29,855,115	720 \$27,261,900	642 \$23,836,456	28 \$1,385,676						2,172 \$82,339,146

AVERAGES ---

Attained Age 56.97
Years Retired 1.34
Annual Benefit \$37,909

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
ACTIVE AFTER DROP

CELLS DEPICT -

MEMBER COUNT
TOTAL BENEFITS
DROP BENEFITS

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 15	15 - 20	20+	Total
< 44										
45 - 49										
50 - 54	7 \$298,224 \$258,228	2 \$68,352 \$35,376								9 \$366,576 \$293,604
55 - 59	233 \$10,643,928 \$9,160,176	187 \$12,544,796 \$7,494,084	58 \$4,201,490 \$2,616,240	23 \$1,733,698 \$1,022,256	21 \$1,382,800 \$742,860	8 \$572,439 \$343,032				530 \$31,079,151 \$21,378,648
60 - 64	94 \$3,039,340 \$2,332,896	111 \$5,684,456 \$2,838,288	115 \$6,859,340 \$3,871,560	112 \$7,408,455 \$4,019,256	66 \$4,152,221 \$2,298,192	176 \$12,380,009 \$7,154,448	6 \$337,493 \$179,400			680 \$39,861,314 \$22,694,040
65 - 69	1 \$9,388 \$2,196	4 \$155,885 \$65,712	40 \$1,913,536 \$832,728	42 \$1,954,208 \$768,924	50 \$2,420,928 \$1,097,256	205 \$12,238,952 \$5,882,652	93 \$7,561,439 \$3,648,456	3 \$264,646 \$113,820		438 \$26,518,982 \$12,411,744
70+		1 \$21,346 \$3,408	4 \$116,755 \$19,560	1 \$25,277 \$3,432	1 \$24,895 \$4,044	59 \$3,127,193 \$1,075,224	99 \$6,073,338 \$2,210,604	66 \$5,237,357 \$2,046,672	17 \$1,644,727 \$532,068	248 \$16,270,888 \$5,895,012
Total	335 \$13,990,880 \$11,753,496	305 \$18,474,835 \$10,436,868	217 \$13,091,121 \$7,340,088	178 \$11,121,638 \$5,813,868	138 \$7,980,844 \$4,142,352	448 \$28,318,593 \$14,455,356	198 \$13,972,270 \$6,038,460	69 \$5,502,003 \$2,160,492	17 \$1,644,727 \$532,068	1905 \$114,096,911 \$62,673,048

AVERAGES ---

Attained Age 63.88
Post Drop Years 4.96
Active Salary \$59,893
Annual Benefit \$32,899

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
REGULAR RETIREES

CELLS DEPICT -

MEMBER COUNT
TOTAL BENEFITS

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 15	15 - 20	20+	Total
< 40										
40 - 44	20 \$314,376	13 \$192,612	4 \$45,324							37 \$552,312
45 - 49	96 \$2,201,544	78 \$1,729,140	49 \$1,081,908	56 \$1,283,004	50 \$1,145,772	64 \$1,370,952				393 \$8,812,320
50 - 54	123 \$3,787,548	114 \$3,614,820	107 \$3,104,352	122 \$3,402,156	104 \$2,656,080	428 \$9,674,724	67 \$1,373,628	1 \$11,880		1,066 \$27,625,188
55 - 59	214 \$6,792,864	283 \$9,883,416	265 \$9,267,336	562 \$21,498,144	590 \$23,229,012	1,170 \$40,847,844	302 \$6,645,060	100 \$1,578,264		3,486 \$119,741,940
60 - 64	663 \$12,955,584	744 \$14,778,060	564 \$11,070,156	690 \$14,283,996	604 \$13,349,976	3,300 \$121,429,080	1,319 \$50,388,636	393 \$7,002,036	143 \$1,882,548	8,420 \$247,140,072
65 - 69	396 \$9,214,476	549 \$14,079,312	470 \$11,672,976	574 \$13,278,564	527 \$12,308,988	4,288 \$92,869,128	4,318 \$168,338,592	2,390 \$84,242,172	770 \$11,436,696	14,282 \$417,440,904
70 - 74	132 \$3,904,572	195 \$5,441,772	207 \$6,192,552	241 \$6,623,424	291 \$7,122,432	2,382 \$60,407,496	3,897 \$82,702,068	5,822 \$206,815,692	3,067 \$86,346,720	16,234 \$465,556,728
75 - 79	35 \$970,848	62 \$2,354,100	43 \$1,460,004	77 \$2,528,976	77 \$2,609,808	767 \$21,558,624	1,303 \$33,804,180	3,318 \$63,642,420	6,346 \$198,263,160	12,028 \$327,192,120
80 - 84	11 \$262,116	10 \$426,084	5 \$235,392	16 \$515,508	18 \$430,380	159 \$5,618,856	367 \$11,745,144	860 \$21,341,568	6,122 \$155,840,364	7,568 \$196,415,412
85 - 89		2 \$19,044	3 \$69,036	2 \$114,252	4 \$172,332	27 \$1,053,180	68 \$2,400,468	210 \$5,416,920	3,934 \$94,627,440	4,250 \$103,872,672
90+		1 \$7,116				5 \$226,332	7 \$209,916	25 \$778,260	2,273 \$49,033,524	2,311 \$50,255,148
Total	1,690 \$40,403,928	2,051 \$52,525,476	1,717 \$44,199,036	2,340 \$63,528,024	2,265 \$63,024,780	12,590 \$355,056,216	11,648 \$357,607,692	13,119 \$390,829,212	22,655 \$597,430,452	70,075 \$1,964,604,816

AVERAGES ---

Attained Age 72.60
Years Retired 15.53
Annual Benefit \$28,036

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT
TOTAL BENEFITS

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 15	15 - 20	20+	Total
< 40	1 \$17,580	1 \$22,344	1 \$14,256	2 \$37,608	2 \$28,992	4 \$63,756				11 \$184,536
40 - 44	8 \$234,456	5 \$59,040	8 \$198,360	4 \$86,976	7 \$112,476	28 \$471,384	4 \$56,520			64 \$1,219,212
45 - 49	11 \$327,648	12 \$300,660	16 \$373,848	13 \$298,260	13 \$347,616	50 \$989,400	25 \$348,504	6 \$69,972		146 \$3,055,908
50 - 54	27 \$604,264	17 \$368,544	23 \$484,788	25 \$480,240	27 \$593,592	106 \$2,273,652	37 \$597,408	14 \$138,540	10 \$91,956	286 \$5,632,984
55 - 59	30 \$499,916	33 \$647,316	27 \$469,848	18 \$329,352	24 \$362,196	175 \$2,730,300	80 \$1,291,212	38 \$424,644	30 \$297,960	455 \$7,052,744
60 - 64	12 \$264,684	21 \$295,848	11 \$185,724	37 \$529,788	37 \$496,428	210 \$3,276,384	123 \$1,700,100	96 \$1,145,340	92 \$979,596	639 \$8,873,892
65 - 69	2 \$24,948	4 \$56,640	7 \$70,548	3 \$27,888	11 \$174,624	142 \$2,072,436	150 \$2,144,772	160 \$2,060,868	203 \$2,195,460	682 \$8,828,184
70 - 74	1 \$11,724			3 \$40,176		54 \$750,672	131 \$1,848,240	188 \$2,269,236	339 \$3,975,396	716 \$8,895,444
75 - 79				1 \$11,784	1 \$13,776	8 \$112,224	28 \$388,248	113 \$1,270,668	353 \$3,824,376	504 \$5,621,076
80 - 84					1 \$10,992		4 \$67,068	14 \$159,348	293 \$3,045,480	312 \$3,282,888
85 - 89								4 \$32,292	122 \$1,274,964	126 \$1,307,256
90+									41 \$439,080	41 \$439,080
Total	92 \$1,985,220	93 \$1,750,392	93 \$1,797,372	106 \$1,842,072	123 \$2,140,692	777 \$12,740,208	582 \$8,442,072	633 \$7,570,908	1,483 \$16,124,268	3,982 \$54,393,204

AVERAGES --- Attained Age 67.47
Years Retired 16.86
Annual Benefit \$13,660

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
SURVIVOR BENEFITS

CELLS DEPICT -

MEMBER COUNT
TOTAL BENEFITS

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 15	15 - 20	20+	Total
< 40	28 \$400,548	32 \$410,652	31 \$361,356	25 \$298,092	23 \$279,900	84 \$1,174,104	39 \$591,660	14 \$215,844	9 \$134,028	285 \$3,866,184
40 - 44	8 \$134,784	13 \$241,032	17 \$255,876	15 \$197,100	8 \$107,472	55 \$843,768	20 \$303,288	18 \$303,900	15 \$156,216	169 \$2,543,436
45 - 49	18 \$341,040	25 \$366,480	19 \$382,788	17 \$230,952	19 \$258,444	49 \$605,916	22 \$343,524	24 \$392,304	18 \$243,324	211 \$3,164,772
50 - 54	22 \$377,028	43 \$776,868	24 \$428,460	23 \$359,172	23 \$337,476	95 \$1,227,900	55 \$851,496	36 \$395,928	47 \$585,216	368 \$5,339,544
55 - 59	40 \$727,128	32 \$639,972	38 \$771,396	23 \$524,988	22 \$381,684	91 \$1,533,768	73 \$771,924	54 \$678,444	60 \$803,196	433 \$6,832,500
60 - 64	46 \$1,091,352	57 \$1,071,600	48 \$1,040,580	32 \$586,992	32 \$656,256	135 \$2,506,176	97 \$1,409,388	65 \$1,114,596	74 \$1,135,692	586 \$10,612,632
65 - 69	68 \$1,459,164	61 \$1,238,076	59 \$1,336,896	62 \$1,394,844	36 \$877,476	199 \$4,731,720	157 \$3,059,268	84 \$1,378,524	110 \$1,383,348	836 \$16,859,316
70 - 74	94 \$2,666,184	99 \$2,720,052	99 \$2,636,148	73 \$1,705,584	77 \$2,100,816	280 \$7,499,304	213 \$5,282,928	131 \$2,956,020	181 \$2,837,448	1,247 \$30,404,484
75 - 79	98 \$3,008,472	115 \$3,080,700	110 \$3,075,060	74 \$1,794,228	91 \$2,469,684	288 \$7,754,052	192 \$4,616,664	135 \$3,209,844	249 \$4,513,800	1,352 \$33,522,504
80 - 84	90 \$2,250,492	114 \$2,931,888	96 \$2,549,424	77 \$1,869,108	72 \$1,930,452	296 \$7,776,000	200 \$4,916,040	153 \$3,466,548	302 \$5,840,220	1,400 \$33,530,172
85 - 89	59 \$1,573,008	81 \$2,033,340	56 \$1,487,892	52 \$1,293,516	47 \$1,007,532	222 \$5,271,804	141 \$3,046,128	122 \$2,413,044	237 \$4,659,144	1,017 \$22,785,408
90+	24 \$580,704	27 \$497,820	23 \$388,992	31 \$591,300	27 \$509,940	115 \$2,317,596	108 \$1,997,112	88 \$1,735,980	196 \$3,612,372	639 \$12,231,816
Total	595 \$14,609,904	699 \$16,008,480	620 \$14,714,868	504 \$10,845,876	477 \$10,917,132	1,909 \$43,242,108	1,317 \$27,189,420	924 \$18,260,976	1,498 \$25,904,004	8,543 \$181,692,768

AVERAGES ---

Attained Age 72.91
Years Retired 11.10
Annual Benefit \$21,268

TRSL MEMBERSHIP PROFILE
TERMINATED VESTED

CELLS DEPICT -

MEMBER COUNT
TOTAL BENEFITS

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 20										
20 - 24										
25 - 29			88 \$546,159							88 \$546,159
30 - 34		1 \$6,024	727 \$5,437,120	32 \$439,891						760 \$5,883,035
35 - 39		1 \$5,919	1,112 \$8,966,576	286 \$4,441,659	17 \$336,736					1,416 \$13,750,890
40 - 44		2 \$8,809	1,062 \$8,784,522	444 \$6,900,210	162 \$3,958,683	4 \$151,784				1,674 \$19,804,007
45 - 49		5 \$20,708	836 \$6,648,853	437 \$6,284,232	167 \$3,809,858	32 \$1,030,602				1,477 \$17,794,253
50 - 54		6 \$24,525	868 \$6,375,207	470 \$6,189,978	147 \$2,917,973	35 \$1,008,047	19 \$776,214			1,545 \$17,291,945
55 - 59		6 \$17,918	725 \$5,217,610	436 \$5,376,051	195 \$3,562,102	35 \$738,136	3 \$107,898			1,400 \$15,019,716
60 - 64	2 \$55	9 \$25,570	316 \$2,006,140	154 \$1,590,739	64 \$937,496	9 \$223,277	4 \$115,389	1 \$48,484		559 \$4,947,152
65 - 69		1 \$3,667	114 \$623,012	40 \$395,802	31 \$498,799	7 \$141,704	5 \$114,474	1 \$50,820		199 \$1,828,278
70+		4 \$5,658	62 \$288,603	38 \$292,951	10 \$99,931	6 \$109,200	4 \$181,723	2 \$53,573	1 \$75,117	127 \$1,106,757
Total	2 \$55	35 \$118,798	5,910 \$44,893,801	2,337 \$31,911,514	793 \$16,121,580	128 \$3,402,751	35 \$1,295,698	4 \$152,877	1 \$75,117	9,245 \$97,972,191

AVERAGES --- Attained Age 47.70
Service Years 9.43
Annual Benefit \$10,597

Appendix A
MEMBERSHIP DATA

TRSL Actuarial Valuation
June 30, 2022

TRSL MEMBERSHIP PROFILE
RETIREES EARNING POST-RETIREMENT SUPPLEMENT

CELLS DEPICT -

MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

Age/Years	<1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44										
45 - 49	2 \$126,942									2 \$126,942
50 - 54	5 \$316,521	8 \$462,586								13 \$779,107
55 - 59	9 \$375,179	9 \$613,452								18 \$988,631
60 - 64	7 \$320,637	16 \$969,195								23 \$1,289,832
65 - 69	9 \$358,849	15 \$1,023,915								24 \$1,382,764
70+	6 \$192,869	4 \$242,259								10 \$435,128
Total	38 \$1,690,997	52 \$3,311,407								90 \$5,002,404

AVERAGES --- Attained Age 62.11
Service Years 1.18
Active Salary \$55,582

SUMMARY OF PLAN PROVISIONS

EFFECTIVE DATE:

August 1, 1936

EMPLOYER:

The State of Louisiana, any city, parish, or other local school board, the State Board of Elementary and Secondary Education, any board created by Article VIII of the Constitution of Louisiana, or any other agency of and within the state or a political subdivision by which a teacher is paid.

ELIGIBILITY FOR PARTICIPATION:

Condition of employment for all 'teachers' as defined by Louisiana Revised Statutes, Section 11:701(35)(a).

CREDITABLE SERVICE:

Service as a teacher while member of the system.

ADDITIONAL SERVICE:

1. Credit for service canceled by withdrawal of accumulated contributions may be restored by member by paying the amount withdrawn plus interest.
2. Service rendered in public school system of another state may be purchased at the cost dictated by Louisiana Revised Statutes, Section 11:158, or at the member's option receive service credit based on the funds transferred.
3. Credit for service in non-participating charter schools, non-public Louisiana college or university, or state approved Louisiana elementary or secondary non-public or parochial schools may be purchased at the actuarial present value of the additional retirement benefit, or at the member's option receive service credit based on the funds transferred.
4. Maximum of 4 years of credit for military service may be obtained for each member, contingent on payment of actuarial cost.
5. Credit for legislative service of former teacher, now legislator, may be purchased at the actuarial cost.
6. Conversion of Sick Leave to Membership Service: At retirement, or at death before retirement of member with surviving spouse or dependent or both who are entitled to benefits, unused accumulated sick leave will be added to membership service. Conversion of unused sick and annual leave cannot be used to obtain retirement eligibility. Sick leave accumulated after January 30, 1990, can be converted to a maximum one-year service credit. Sick leave is converted on the following basis:

Leave Earned Prior to 6/30/88	
Accumulated Sick Days	Fraction of Year Credit
25-45	0.25 year
46-90	0.50 year
91-135	0.75 year
136-180	1.00 year

Each additional 45 days of sick leave, up to 720 days total, provides an additional 0.25 years of service credit.

Leave Earned After 6/29/88				
Accumulated Sick Days (by Member Classification)				Fraction of Year Credit
9 Month	10 Month	11 Month	12 Month	
10-18	11-20	12-22	13-24	0.1
19-36	21-40	23-44	25-48	0.2
37-54	41-60	45-66	49-72	0.3
55-72	61-80	67-88	73-96	0.4
73-90	81-100	89-110	97-120	0.5
91-108	101-120	111-132	121-144	0.6
109-126	121-140	133-154	145-168	0.7
127-144	141-160	155-176	169-192	0.8
145-162	161-180	177-198	193-216	0.9
163-180	181-200	199-220	217-240	1.0

EARNABLE COMPENSATION:

The compensation earned by a member for qualifying service.

FINAL AVERAGE COMPENSATION (FAC)

For members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011, the average annual earnable compensation is the highest 60 successive months of employment. The average compensation for purposes of computing benefits cannot increase more than 15% per year.

For all other members, the average annual earnable compensation is the highest 36 successive months of employment; the average compensation for purposes of computing benefits cannot increase more than ten percent per year.

Per R.S.11:768(C) and 892, a member's benefit shall not exceed 100% of their FAC. If the maximum benefit accrual (100%) is reached, employer contributions continue but employee contributions are discontinued. Average final compensation is not limited to the years for which employee contributions were made. Compensation is limited by the Internal Revenue Code Section 401(a)(17) compensation limit.

Includes workmen's compensation, and PIP's program in accordance with the following:

Years of Participation	% of Earnings to be Included
3	60%
4	80%
5	100%

However, if member completed at least two years and subsequently becomes disabled, he shall receive 40% of such earnings. If he has completed one year and becomes disabled, he shall receive 20% of such earnings.

ACCUMULATED CONTRIBUTIONS:

Sum of all amounts deducted from compensation of members.

EMPLOYEE CONTRIBUTIONS:

8% of earnable compensation. Prior to July 1, 1989, 7% of earnable compensation.

EMPLOYER CONTRIBUTIONS:

Determined in accordance with Louisiana Revised Statutes, Sections 11:102 and 11:102.2, which require the employer rate to be actuarially determined and set annually, based on the Public Retirement Systems' Actuarial Committee's recommendation to the Legislature.

NORMAL RETIREMENT ELIGIBILITY AND BENEFIT:

Retirement Eligibility:

1. Members whose first employment making them eligible for membership in one of the state systems occurred on or after July 1, 2015 are eligible to retire with a 2.5% accrual rate at age 62 with five years of service credit. These members may also retire with an actuarial reduction with 20 years of service credit at any age.
2. Members whose first employment making them eligible for membership in a Louisiana state retirement system on or after January 1, 2011 and before July 1, 2015 may retire with a 2.5% accrual rate after attaining age 60 with at least five years of service credit. Members are eligible for an actuarially reduced benefit with 20 years of service at any age.
3. For all other members:

If hired on or after July 1, 1999, members are eligible for a 2.5% accrual rate at the earliest of age 60 with five years of service, age 55 with 25 years of service, or at any age with 30 years of service. Members may retire with an actuarially reduced benefit with 20 years of service at any age.

If hired before July 1, 1999, members are eligible for a 2% accrual rate at the earliest of age 60 with five years of service, or at any age with 20 years of service and are eligible for a 2.5% accrual rate at the earliest of age 65 with 20 years of service, age 55 with 25 years of service, or at any age with 30 years of service.

Benefit:

Annuity which shall be the actuarial equivalent of accumulated employee contributions at retirement date, and annual pension, which, together with annuity, provides total allowance equal to the applicable accrual rate times final average compensation times years of creditable service (including unused sick leave). Members hired before June 30, 1986 receive an additional \$300 annual supplemental benefit (Act 608 of 1986).

1. Annual benefit may not exceed 100% of average earnable compensation.
2. The annual pension cannot exceed the maximum benefit provided under Section 415(b) of the Internal Revenue Code and related Federal Regulations as adjusted for inflation and form of benefit other than life annuity or qualified joint and survivor annuity.

POST RETIREMENT INCREASES:

The provisions regarding future permanent benefit increases (PBIs) were substantially changed by Act 399 of 2014. PBIs may be granted, if requested by the Board and approved with a two-thirds vote of both houses of the legislature, provided there are sufficient funds in the Experience Account to fully fund the increase on an actuarial basis.

Experience Account Credits/Debits: After allocation of the first \$200,000,000 to the unfunded accrued liability, the Experience Account is credited with up to 50% of the remaining excess investment income, up to a maximum balance as described below. The \$200,000,000 threshold is indexed based upon the increase in the actuarial value of assets. Excess investment income is investment income for the prior fiscal year in excess of the expected income based on the actuarial valuation rate for that fiscal year. Balances in the Experience Account accrue interest at the actuarial rate of return during the prior year. All credits are limited as follows:

If the system’s funded ratio is less than 80%, the Experience Account is limited to the reserve necessary to grant one PBI. If the funded ratio is at least 80%, the Experience Account is limited to the reserve necessary to fund two PBI’s. The Experience Account is debited for the increase in actuarial accrued liability resulting from the increases.

Permanent Benefit Increases: No increase can be granted if the legislature granted an increase in the preceding fiscal year, unless the system is 85% funded or greater. Additionally, PBIs are limited to the lesser of the increase in the Consumer Price Index, U.S. city average for all urban consumers (CPI-U) for the 12-month period ending on the system’s valuation date, or by a percentage increase determined by the system’s funded ratio:

Funded Ratio	PBI Increase Limit
< 55%	0%
55% to <65%	1.5%
65% to <75%	2.0%
75% to <80%	2.5%
80% +	3.0%

Beginning July 1, 2015, any increase is limited to the first \$60,000 of a retiree’s annual benefit, increased annually by the CPI-U for the 12-month period ending in June. If the actuarial rate of return for the prior plan year is less than 8.25%, regardless of the discount rate, the increase is limited to the lesser of 2% or the amount described above.

Eligibility Requirements: Benefits are restricted to those retirees who have attained age 60 and have been retired for at least one year. The minimum age of 60 for the receipt of a benefit increase does not apply to disability retirees.

DISABILITY RETIREMENT:

Eligibility:

Members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011 are eligible with ten years of service credit. All other members are eligible with five years of service; certification of disability by medical board (medical examination required once in every year for the first five years of disability retirement, and once in every three years thereafter, until age 60 if first employment making member eligible for membership in a state retirement system occurred before July 1, 2015 or until age 62 otherwise).

Benefit:

Members whose first employment makes them eligible for membership in a Louisiana state retirement system on or before December 31, 2010:

1. If ineligible for service retirement at disability, disability pension will be 2.5% of average compensation multiplied by years of service. Benefit is limited to 50% of average compensation and will not be less than the lesser of 40% of the state minimum salary for a beginning teacher with a bachelor's degree or 75% of average compensation.
2. Additional 50% of member's benefit payable if minor child is present, but total amount to family limited to 75% of final average compensation.
3. Member will become a regular retiree upon attainment of the earliest age for retirement eligibility as if the member continued in service, without further change in compensation. Benefit is based on years of creditable service but not less than the disability benefit. Benefit for minor children continue as long as the retiree has a minor child.
4. Upon death of a disability retiree, surviving spouse, married to retiree at least two years prior to death of the disability retiree, shall receive 75% of disability benefit. Upon death of an unmarried retiree with minor children, the benefit shall equal 50% of disability benefit.
5. Upon recovery of disability as determined by the board of trustees, upon advice of the medical board, members returning to active membership for at least three years, starting no later than one year after recovery, shall be credited with one year of service for each year disabled for purposes of establishing benefit eligibility, but not for computation of benefits.

Members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011:

1. Maximum disability retirement benefit which shall be equivalent to the regular retirement formula without reduction by reason of age.
2. Selection of a retirement option shall be made when application for disability is filed. If the disability retiree dies, the option selected upon disability retirement shall be applied to his disability retirement benefit.

SURVIVOR'S BENEFITS:

Eligibility and Benefit:

1. Surviving Spouse with minor children of an active member with five years of service with at least two years earned immediately prior to death; or a member with 20 years of service regardless of when earned or whether in active service at time of death will receive the greater of:
 - A.) \$600 per month, or
 - B.) 50% of benefit that would have been payable to retiree if he had retired on the date of death. 50% of spouse's benefit payable for each minor child (up to two), with total benefit to family at least equal to the Option 2 accrued benefit based on actual service credit. Benefits to spouse cease upon remarriage and resume upon subsequent divorce or death of new spouse; however, if the member was eligible to retire or if the spouse remarries after attaining age 55, benefits shall not cease upon remarriage. When minor children are no longer present and the deceased member had at least ten years of service, the spouse's benefit reverts to the Option 2 retirement benefit for the eligible spouse. If a deceased member had less than ten years, then the spouse will receive a refund of any remaining member contributions and monthly survivor benefits will cease.
2. Surviving Spouse without minor children of an active member with ten years of creditable service will receive the greater of:
 - A.) \$600 per month, or
 - B.) Option 2 equivalent of accrued benefit based on actual service. Spouse's benefit payable for life. Benefits to spouse cease upon remarriage and resume upon subsequent divorce or death of new spouse; however, if the member was eligible to retire or if the spouse remarries after attaining age 55, benefits shall not cease upon remarriage.
3. Beneficiaries not eligible for survivor benefits described above will receive a lump-sum refund of the member's accumulated contributions.

REFUND OF CONTRIBUTIONS:

Members who terminate employment in all positions eligible for TRSL membership are entitled to a full refund of member contributions. If membership ceases due to death prior to retirement, accumulated member contributions are returnable to a designated beneficiary, if any; or to the member's estate.

TERMINATION WITH VESTED SERVICE:

Any member with credit for five years of service who withdraws from service may elect to leave accumulated contributions in the system. If first employment making member eligible for membership in a Louisiana state retirement system occurred on or before June 30, 2015, he may apply for retirement and begin receiving a retirement benefit at age 60 based on the credits he had at date of withdrawal, or otherwise at age 62.

OPTIONAL FORMS OF BENEFIT:

In lieu of receiving normal retirement benefit, member may elect to receive actuarial equivalent of retirement allowance in a reduced form as follows:

Option 1 - If a member dies before receiving present value of annuity in monthly payments, balance paid to designated beneficiary.

Option 2 - Reduced retirement allowance, if member dies, to be continued to designated beneficiary for his lifetime.

Option 3 - One-half of reduced retirement allowance, if member dies, to be continued to designated beneficiary for his lifetime.

Option 4 - Other benefits of equal actuarial value may be elected with approval of the Board of Trustees.

Options 2A, 3A, 4A - Same as Options 2, 3, and 4, except that reduced benefit reverts to maximum if beneficiary predeceases retiree.

Automatic COLA Option – Members may choose an irrevocable election at retirement to receive an actuarially reduced benefit which increases 2.5% annually. The increase begins on the first retirement anniversary date, but not before the retiree attains age 55 or would have attained age 55 in the case of a surviving spouse. This option can be chosen in combination with the above options. (Per Act 270 of 2009, effective July 1, 2009.)

Initial Lump Sum Benefit Option - Members who did not participate in DROP may elect an actuarially reduced pension and receive a lump-sum equal to not more than 36 months of the maximum monthly pension.

DEFERRED RETIREMENT OPTION PLAN:

Instead of terminating employment and accepting a service retirement allowance, any member who has met the eligibility requirements described below may elect to participate in the Deferred Retirement Option Plan (DROP).

Normal Eligibility:

Members whose first employment making him eligible for membership in one of the state retirement systems occurred on or before December 31, 2010, and who is not covered by Lunch Plan A or Lunch Plan B and who has 30 years of service (YOS) at any age, 25 YOS at 55, or 20 YOS (exclusive of military service other than qualified military service as provided in 26 U.S.C. 414(u) earned on or after December 12, 1994), and is at least age 65 may elect to participate in DROP. A member with ten YOS, exclusive of military service other than qualified military service as provided in 26 U.S.C. 414(u) earned on or after December 12, 1994, and who is at least age 60 may elect to participate in DROP, but all benefits payable at any time shall be calculated using only a 2% benefit formula.

Members whose first employment making him eligible for membership in one of the state retirement systems occurred between January 1, 2011 and June 30, 2015, are not in Lunch Plan A or Lunch Plan B, and who has five years of service at age 60 may participate in DROP.

Members whose first employment making him eligible for membership in one of the state retirement systems occurred on or before June 30, 2015, who has 30 years of service at age 55 or ten years of service at age 60 may participate in DROP.

Members whose first employment making him eligible for membership in one of the state retirement systems occurred on or after July 1, 2015, who has at least five years of service at age 62 may participate in DROP.

An election to participate may only be made once, for a period not to exceed three years beginning within 60 days of reaching the eligibility described above.

Benefit:

Upon termination of employment, a participant will receive, at his option:

- (1) Lump sum payment (equal to the payments to the account)
- (2) A true annuity based upon his account, or
- (3) Other methods of payment approved by the Board of Trustees.

If a participant dies during the period of participation in the program, his account balance shall be paid to the beneficiary, or if none, to his estate in any form approved by the Board of Trustees.

If employment is not terminated at the end of DROP participation, payments into the account cease and account earns interest. The participant resumes active contributing membership and earns an additional retirement benefit based on additional service rendered. The method of computation of the additional benefit is subject to the following:

- (1) If additional service was less than the period used to determine Final Average Compensation, average compensation figure to calculate the additional benefit will be the same as used to calculate initial benefit.
- (2) If additional service was earned for a period greater than the number of months used to determine Final Average Compensation, the average compensation figure used to calculate the additional benefit will be based on compensation during the period of additional service.

DROP Accounts established prior to January 1, 2004, earn interest following termination of DROP at a rate 0.5% below the actuarial rate of the System's investment portfolio. DROP accounts established on or after January 1, 2004 are credited with money market rates.

**DESCRIPTION OF BENEFITS
FOR MERGED LSU EMPLOYEES**

GENERAL:

Eligibility for benefits is based on the eligibility requirements of the Teachers' plan, except for deaths and disabilities before 1984. All service, funded and non-funded, is used in determining eligibility.

Final Average Salary was the average of the three highest years, except for academic year employees who retired within three years after January 1, 1979. For this group, any salary used in the Final Average Salary calculation, which was earned before January 1, 1979, was increased by 2/9ths.

The Social Security breakpoint average, for service under the funded LSU plan, was frozen at the December 31, 1978 level. That is, the breakpoint average for funded service was calculated as of December 31, 1978 and kept constant. This produced the following breakpoint averages:

**Social Security Breakpoint Average
(for LSU funded service)**

<u>Calendar Year of Entry</u>	<u>Breakpoint Average</u>
1971 or before	13,400
1972	13,800
1973	14,600
1974	15,360
1975	15,900
1976	16,500
1977	17,100
1978	17,700

RETIREMENT BENEFITS:

Retirement benefits are calculated using LSU funded service with the LSU formula and service after December 31, 1978, with the Teacher's formula. Thus, the "funded" benefit is the sum of (1) 1.33% of final average salary under the Social Security breakpoint average plus 2.5% of final average salary over the Social Security breakpoint average, times years of "funded" service with LSU before December 31, 1978; (2) 2.5% (or 2% if total service less than 20 years) of final average salary for years since January 1, 1979; and (3) \$300.

SURVIVOR'S BENEFITS:

For deaths after 1983, the provisions of the Teachers' plan apply. However, the benefit is calculated using all service, funded and non-funded, then prorated by service between the funded and non-funded portions. Children's benefits are also prorated into the funded and non-funded portions.

DISABILITY BENEFITS:

For disabilities after 1983, the provisions of the Teachers' plan apply. However, the benefit is calculated using all service, then prorating by service between the funded and non-funded portions. Children's benefits are also prorated.

VESTING BENEFITS:

Benefits for terminated vested members was determined as outlined under "Retirement Benefits."

REFUND OF CONTRIBUTIONS:

Terminated members are allowed a refund of accumulated contributions as described by the Teachers' plan.

COOPERATIVE EXTENSION PERSONNEL:

The LSU employees are eligible for the supplemental benefit described in Section 700.2 of Act 643 of 1978. The benefit is equal to 1% for the first five years of service, 3/4% for the next five years, and 1/2% thereafter. The funded benefit is the benefit based on service after September 12, 1975.

OPTIONAL FORMS OF BENEFITS:

Retiring members may elect options as described by the Teachers' plan.

DEFERRED RETIREMENT OPTION PLAN:

Eligible members may participate under same requirements as described by the Teachers' plan.

DESCRIPTION OF BENEFITS
FOR MERGED SCHOOL LUNCH EMPLOYEES

EFFECTIVE DATE:

The School Lunch Employees' Retirement System was originally established on January 1, 1953.

On July 1, 1980, the School Lunch Employees' Retirement System was restructured. All individuals who become employed after July 1, 1980, shall become members of Plan A or Plan B as determined by the agreement in effect for each employer.

Plan A: Parishes which had withdrawn from Social Security coverage became known as Plan A parishes. Those participating in both the regular and the supplemental plan or only in the supplemental plan shall become members of Plan A.

Plan B: Parishes which had not withdrawn from Social Security coverage became known as Plan B parishes. Those participating only in the regular plan shall become members of Plan B.

Effective July 1, 1983 Plan A and Plan B were merged into TRSL.

CREDITABLE SERVICE:

Service as an employee while member of the system.

MILITARY SERVICE:

Maximum of four years of credit may be purchased.

ADDITIONAL CREDITABLE SERVICE:

Credit for service canceled by withdrawal of accumulated contributions may be restored by paying into system the amount withdrawn plus regular interest.

EMPLOYEE CONTRIBUTIONS:

Plan A: 9.10% of monthly earnings
Plan B: 5% of monthly earnings

EMPLOYER CONTRIBUTIONS:

Plan A and Plan B: Actuarial Required Amount (Effective July 1, 1989)

SCHOOL LUNCH PLAN A

RETIREMENT BENEFIT:

Members hired after June 30, 1983 earn regular Teachers' benefits. The benefit description below applies to members hired prior to July 1, 1983.

NORMAL RETIREMENT:

Eligibility:

1. Age 60 and five years of creditable service.
2. Age 55 and 25 years of creditable service.
3. 30 years of creditable service, regardless of age.

Benefit:

3% of average final compensation times years of creditable service.

Members of only the supplemental plan prior to July 1, 1980 who were age 60 or older at the time the member's employer terminated its agreement with the Department of Health, Education and Welfare, and who became a member of the retirement system because of this termination earned one percent of average final compensation plus two dollars per month for each year of service credited prior to July 1, 1980, plus 3% of average final compensation for each year of service credited after July 1, 1980.

Members hired before June 30, 1986 receive an additional \$300 annual supplemental benefit.

Benefits are limited to 100% of average final compensation.

DISABILITY RETIREMENT:

Eligibility:

Five years of creditable service; certification of disability by the State Medical Disability Board.

Benefit:

Normal retirement allowance if eligible; otherwise, an amount equal to the normal retirement allowance to which the member would have been entitled had he met eligibility requirements; provided the amount is subject to a minimum of 60% and a maximum of 100% of average final compensation, in the event no optional selection is chosen.

SURVIVOR'S BENEFITS:

Eligibility:

1. Surviving spouse with minor children of a member with five years of service credit with at least two years earned immediately prior to death, or 20 years of service credit regardless of when earned or whether the deceased member was in active service at the time of death.

2. Surviving spouse with no minor children of member with ten or more years of service credit with at least two years earned immediately prior to death, or 20 years of service credit regardless of when earned or whether the deceased member was in active service at the time of death.
3. Beneficiary not eligible for 1 or 2.

Benefit:

1. Greater of:
 - A.) \$600 per month, or
 - B.) 50% of benefit that would have been payable upon retirement at age 60 had member continued in service to age 60 without change in compensation. 50% of spouse's benefit payable for each minor child (maximum two children), with total benefit to family at least equal to the Option 2 benefit. Accrued Benefit based on actual service credit. Benefits to spouse cease upon remarriage and will resume upon subsequent death or divorce of new spouse. When minor children are no longer present, spouse's benefit reverts to benefit in (2), if spouse is eligible for such benefit.
2. Greater of:
 - A.) \$600 per month, or
 - B.) Option 2 equivalent of accrued benefit based on actual service. Surviving spouse must have been married to the deceased member at least one year prior to death. If the member had not been eligible for retirement upon date of death, benefits to spouse cease upon remarriage, and resume upon subsequent death or divorce of new spouse.
3. Return of member's accumulated contributions.

SCHOOL LUNCH PLAN B

NORMAL RETIREMENT:

Eligibility:

Members whose first employment making them eligible for membership in one of the state systems occurred on or after July 1, 2015 are eligible to retire after attaining age 62 with five years of service credit. These members may also retire with an actuarial reduction with 20 years of service credit at any age.

Members whose first employment makes them eligible for membership in a Louisiana state retirement system before July 1, 2015 are eligible to retire after attaining age 60 with five years of service or at age 55 with 30 years of service.

Benefit:

Annual pension which provides total allowance equal to 2% of average final compensation times years of creditable service. Members hired before June 30, 1986 receive an additional \$300 annual supplemental benefit.

DISABILITY RETIREMENT:

Eligibility:

Five years of creditable service; certification of disability by the State Medical Disability Board.

Benefit:

Normal retirement allowance if eligible; otherwise 2% of average final compensation times years of creditable service; provided amount not less than 30%, nor more than 75% of average final compensation, in the event no optional selection is made.

SURVIVOR'S BENEFITS:

Eligibility: 20 or more years of creditable service.

Benefit: Option 2 benefit.

SCHOOL LUNCH PLAN A and PLAN B

OPTIONAL FORMS OF BENEFIT:

Retiring members may elect options as described by the Teachers' plan.

RETURN OF CONTRIBUTIONS:

Should a member not eligible to retire cease to be an employee, he shall be paid the amount of his accumulated contributions upon demand. Should a member's death occur prior to retirement with no survivors eligible for benefits, his accumulated contributions are returnable to a designated beneficiary, if any; otherwise, to his estate.

TERMINATION WITH VESTED SERVICE:

Any member with credit for five years of service who withdraws from service may elect to leave accumulated contributions in system until his earliest normal retirement date, when he may apply for retirement and begin receiving a retirement benefit based on average final compensation and creditable service at date of withdrawal.

DEFERRED RETIREMENT OPTION PLAN:

Retiring members may elect options as described by the Teachers' plan.

FUNDING POLICY

TRSL's funding policy is established by Sections 102 and 102.2 of Title 11 of the Louisiana Revised Statutes. TRSL is funded by employee and employer contributions, as a percentage of payroll, plus investment earnings. The basic elements of the annual required contribution are the normal cost, which is the cost of benefits earned by current active employees that is allocated to the current year, plus amortization of the unfunded accrued liability (UAL). Act 55 of 2014, Section 1, appropriates a percentage of nonrecurring revenue in accordance with the Constitution Article VII, Section 10(D)(2)(b)(ii) and requires the funds to be used to reduce the Initial UAL (IUAL). The funds are used to reduce the Original Amortization Base (OAB), which includes the IUAL.

Per State constitutional provisions, the employer contribution rate cannot drop below 11.8%, without regard to employer credits, and without a corresponding adjustment to the employee contribution rate. Per statutory provisions, the employer contribution rate cannot drop below 15.5% until the UAL that existed on June 30, 2004 is fully funded. Amounts paid to the system due to the minimum will be accumulated in the employer credit account to be used exclusively to reduce any UAL created before July 1, 2004.

Employee contribution rates are fixed and established by statutes. Employer contributions are determined using the Entry Age Normal actuarial cost method, as required by statute, and actuarial assumptions regarding future plan experience, such as long-term expected investment rates of return, future salary increases, and demographic assumptions such as rates of retirement, termination, disability, and mortality. The actuarial assumptions utilized in this valuation can be found in Appendix E. The cost method is used to determine the normal cost, which is divided into the employee and employer portion, both expressed as a percentage of payroll. The cost method also determines the plan's total actuarial accrued liability. The UAL is determined as the total actuarial accrued liability less the plan's valuation assets, which are developed in Section II. The UAL changes annually due to principal payments contributed toward the debt, gains or losses that develop as actual plan experience differs from that assumed by the actuarial assumptions, and if applicable, changes in benefits, or actuarial methods and/or assumptions. Statutes provide for the amortization of changes in the UAL.

Benefit changes resulting in an actuarial cost can only be enacted by a two-thirds vote of the legislature and must be paid within ten years. Non-investment experience gains and losses and investment losses are amortized over 20 years with level payments. Investment gains are first allocated to the OAB and EAAB, without re-amortization, up to the \$200 million threshold amounts, indexed to increases in the actuarial value of assets, beginning June 30, 2016, as required by Act 399 of 2014. By not re-amortizing except when specifically allowed by law, gains applied to these schedules result in earlier pay-off of these schedules. Investment gains above the threshold amount are amortized over 20 years. One-half of investment gains above the threshold are credited to the Experience Account up to the statutory cap and amortized as a loss over 10 years. If the System is less than 80% funded, the net remaining liability of the OAB and EAAB shall be re-amortized after application of the "threshold allocations" in Fiscal Year 2024/2025 and in every fifth fiscal year thereafter. Once the system attains an 80% funded ratio, the OAB and EAAB will be re-amortized following allocations of "threshold allocations" or contribution variance surpluses.

Employers pay the full required employer contribution rate, as recommended to the legislature by the Public Retirement Systems' Actuarial Committee (PR SAC). This rate is determined as the projected actuarially determined contribution divided by the projected payroll. The actual actuarially determined contribution and actual payroll will vary from the projected amounts, resulting in a contribution variance. Per statutory requirements, contribution surpluses through Fiscal Year 2039/2040 will be allocated to the EAAB and contribution deficits will be amortized over a five-year period with level payments.

The funding policy described above is consistent with the plan accumulating adequate assets to make benefit payments when due and improving the funded status of the plan assuming the actuarially determined contributions will be paid when due and all actuarial assumptions will be realized.

DISCUSSION OF RISK

Measuring pension obligations and calculating actuarially determined contributions require the use of assumptions regarding future economic and demographic experience. It should be noted that the liabilities and the corresponding funded status presented in this report would differ if a different assumption set were utilized. Future plan experience may differ from the assumptions used in this valuation resulting in actuarial gains and losses. The extent of these differences will impact the plan's future financial condition, the volatility of future plan measurements, and the volatility of future required contributions. Actuarial losses on assets and liabilities will lead to higher contribution amounts, while actuarial gains on assets and liabilities will lead to lower contribution amounts. Because these risks may not be apparent to the reader, we have included a summary of the key risk factors that should be considered.

Investment Risk

For most plans, investment returns are a significant portion of the assets used to fund plan benefits. Therefore, current plan liabilities are developed by discounting future expected benefits based on the expected returns that will be used to fund those benefits.

Statutory funding policy provides that a portion of investment gains will be transferred to the experience account to fund future Permanent Benefit Increases, should the legislature grant them. The guidance provided in Actuarial Standard of Practice No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, makes it clear that the discount rate is not necessarily the same as the expected investment return assumption. Section 3.5.1 states that the actuary may determine that it is appropriate to adjust the economic assumptions for provisions that are difficult to measure, of which the definition includes gain-sharing provisions. Therefore, in accordance with this guidance, the reasonableness of the discount rate is evaluated against the expected investment return less the portion of returns that are expected to be transferred to the experience account rather than fund regular plan benefits.

Due to the nature of investments, long-term expectations are not a guarantee and actual average long-term returns may be above or below the assumed investment return. Investment experience gains and losses will develop from two sources: (1) the extent to which the actual long-term rate of return used to fund regular plan benefits differs from the discount rate, and (2) the extent to which transfers to the experience account differ from the margin described above. Short-term volatility in actual returns is expected and will result in year-over-year fluctuations in financial metrics. Prolonged periods of investment performance below the assumed rate of return can result in a decrease in funded status (i.e. increases unfunded liabilities) and an increase in contributions required in future years. Of course, the opposite is also true. Therefore, as part of the annual valuation process, the expected return is evaluated in comparison to TRSL's investment consultant's expected return for TRSL's portfolio and industry-average long-term capital market assumptions to determine if the return assumption continues to be reasonable.

Demographic Risk

The results in this report assume demographic characteristics of the plan will follow a pattern consistent with assumptions disclosed for termination of employment, incidence of disabilities, timing of retirement, and duration of payments throughout retirement. Actuarial assumptions are applied to large groups of individuals to reasonably estimate plan liabilities and are not necessarily intended to be applied on an individual basis. As actual demographic experience will differ from the assumptions future experience gains and losses will develop.

Payroll Risk

Individual Salary - Total plan liabilities include the estimated impact of future salary increases on future benefits for individual plan participants. To the extent that future salary increases differ from plan assumptions, gains and losses will develop.

Aggregate Plan Payroll - The valuation determines the Actuarially Determined Contribution for the year immediately following the valuation date and projects the Actuarially Determined Contribution for the following year. The employer contribution rate for the second fiscal year following the valuation date, which is the rate actually paid by the employer, is determined as the projected actuarially determined contribution divided by projected aggregate payroll. If actual aggregate payroll for the projected period exceeds expected aggregate payroll, a contribution surplus will develop. Conversely, if actual aggregate payroll for the projected period is less than expected aggregate payroll, a contribution deficit will develop.

Contribution Risk

This risk results from the potential that actual employer contributions may deviate from actuarially determined contributions, which are determined in accordance with statutory funding policy. The funding policy provides contribution requirements that will result in a reasonable expectation that assets will accumulate to be sufficient to pay plan benefits when due, and eventually reach a 100% funded status if actuarial assumptions are realized in the aggregate. The Louisiana Constitutional requirement that the legislature provide an amount necessary to fund the normal cost and the UAL existing prior to June 30, 1988 further reduces contribution risk.

Other Considerations

Significant legislative changes have been enacted since 2009, which reduced the plan's risk of not accumulating sufficient assets to pay plan benefits when due. Highlights of these changes are listed below:

- Restructuring of UAL payment schedules to eliminate the back-loaded increasing payment schedules. All current and future UAL schedules are amortized with level payments.
- Dedication of significantly more investment experience gains to the reduction of UAL debt before credits can be made to the Experience Account to fund future Permanent Benefit Increases (PBIs).
- Reduction in the maximum PBI percentage that can be granted, until funded status reaches 80%.
- Limitations on frequency of potential for Board to request that future PBI's be granted.
- Reduction in the term of amortization schedules from 30 years to 20 years.
- Requirement that contribution variance surpluses and a portion of investment experience gains be used to reduce the UAL without an immediate reduction to employer contributions.
- Requirement of direct funding of administrative expenses, included in the employer contribution rate, rather than with investment returns.
- Constitutional requirement that benefit provisions enacted by the legislature that have an actuarial cost be amortized over a 10-year period.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared among active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on the risk characteristics and risk tolerance of the plan. For example, plans with a large amount of liability attributable to retirees have a shorter time horizon to recover from losses (such as investment experience losses due to lower than expected investment returns) than plans where the majority of the liability is attributable to active members. For this reason, highly mature plans with a substantial liability due to retirees and inactive members have less tolerance for risk. Similarly,

mature plans paying substantial retirement benefits resulting in a small positive or negative net cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan and assessing risk, we have provided some relevant metrics and discuss the highlights of information derived from these metrics below.

* Asterisks in tables in this section denote dollar values shown in millions.

	(A)	(B)	(C)	(D)	(E)	(F)	(F)/(E)	(A)/(B+C)	(D)/(E)
	Total			Inactive	Total				Accrued
	Active	DROP	Inactive	Accrued	Accrued	Valuation	Funded	Support	Liability
	Members	Members	Members	Liability *	Liability *	Assets *	Ratio	Ratio	Ratio
2013	82,910	2,451	77,022	\$19,074	\$26,018	\$14,669	56.4%	104.3%	73.3%
2014	82,886	2,291	79,531	\$20,014	\$28,120	\$16,146	57.4%	101.3%	71.2%
2015	83,602	2,283	81,865	\$20,498	\$28,646	\$17,457	60.9%	99.4%	71.6%
2016	84,068	2,504	82,517	\$21,017	\$29,272	\$18,254	62.4%	98.9%	71.8%
2017	84,228	2,478	84,199	\$21,438	\$29,763	\$19,210	64.5%	97.2%	72.0%
2018	85,045	2,420	85,634	\$22,326	\$30,872	\$20,320	65.8%	96.6%	72.3%
2019	85,998	2,464	87,041	\$22,827	\$31,574	\$21,183	67.1%	96.1%	72.3%
2020	86,860	2,359	88,528	\$23,233	\$32,341	\$21,971	67.9%	95.6%	71.8%
2021	85,980	2,227	90,029	\$23,642	\$33,059	\$23,742	71.8%	93.2%	71.5%
2022	86,364	2,172	91,845	\$24,560	\$34,593	\$25,504	73.7%	91.9%	71.0%

Funded Ratio: The funded ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 56.4% to 73.7% over the last ten years. This ratio generally reflects the financial health of the plan but should not be considered in isolation since changes in methods and assumptions may reduce the funded ratio but reduce future potential losses and resulting contribution rate increases. For example, during this time period, TRSL has reduced the discount rate from 8.25% to 7.25% and changed the actuarial cost method from projected unit credit to entry age normal which in total have increased the unfunded accrued liability by \$3.6 billion (\$3.3 billion remaining). If not for these changes, the funded ratio would be approximately 81.6%. However, these changes have improved the financial stability of the plan by reducing the potential for future contribution rate increases. If all actuarial assumptions are realized, the funded ratio is expected to increase as unfunded liabilities are amortized in accordance with the plan's funding policy.

Support Ratio: The support ratio is determined as the ratio of active to inactive members. Active membership, which includes Active After DROP members, has increased since 2013. Inactive membership, which includes retirees, survivors, and terminated vested members, has been steadily increasing. The support ratio has decreased from 104.3% to 91.9% over the last ten years. This should be monitored by the investment staff to be sure no cash-flow issues develop that would require pre-mature liquidation of assets, which could result in investment experience losses.

Accrued Liability Ratio: The accrued liability ratio, which is a measure of the proportion of total liability attributable to inactive members, has remained fairly level at just above 70% for the last ten years. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors should be amortized over a shorter time horizon than for a less mature plan. The amortization period for actuarial gains and losses and changes in liability based on change in actuarial methods reduced from 30 years to 20 years on June 30, 2021.

	(A) Market Value of Assets *	(B) Total Payroll (incl. ORP) *	(A)/(B) Asset Volatility Ratio
2013	\$15,490	\$4,250	364.5%
2014	\$17,900	\$4,301	416.2%
2015	\$17,896	\$4,371	409.4%
2016	\$17,538	\$4,423	396.5%
2017	\$19,513	\$4,443	439.2%
2018	\$21,047	\$4,551	462.4%
2019	\$21,652	\$4,645	466.2%
2020	\$21,221	\$4,815	440.7%
2021	\$27,724	\$4,918	563.7%
2022	\$25,051	\$5,136	487.8%

Asset Volatility Ratio: The asset volatility ratio, determined as the ratio of the market value of assets to total payroll, is a measure of the impact of investment volatility on employer contributions which are paid as a percentage of payroll. Since amortization payments for gains and losses are paid as a percentage of total payroll, including payroll for Optional Retirement Plan (ORP) members, the asset liability ratio is determined using payroll that includes ORP payroll. Although MVA growth that exceeds payroll growth may contribute to the financial stability of the plan, the amortization of changes in these higher asset values have a greater impact on contribution volatility as this ratio increases. Since 2013, the asset volatility ratio has increased from 364.5% to 487.8%.

	(A) Contributions*	(B) Benefits*	(A)-(B) Contributions less Benefits*	(C) Market Value of Assets*	(B)/(C) Benefits/ MVA	[(A)-(B)]/(C)
2013	\$1,423	\$1,877	(\$454)	\$15,490	12.1%	-2.9%
2014	\$1,544	\$1,952	(\$408)	\$17,900	10.9%	-2.3%
2015	\$1,592	\$2,028	(\$436)	\$17,896	11.3%	-2.4%
2016	\$1,529	\$2,068	(\$539)	\$17,538	11.8%	-3.1%
2017	\$1,491	\$2,131	(\$640)	\$19,513	10.9%	-3.3%
2018	\$1,590	\$2,197	(\$607)	\$21,047	10.4%	-2.9%
2019	\$1,623	\$2,231	(\$608)	\$21,652	10.3%	-2.8%
2020	\$1,656	\$2,262	(\$606)	\$21,221	10.7%	-2.9%
2021	\$1,665	\$2,327	(\$662)	\$27,724	8.4%	-2.4%
2022	\$1,739	\$2,372	(\$632)	\$25,051	9.5%	-2.5%

Cash Flow Measures: Mature plans paying substantial retirement benefits resulting in small positive or negative cash flows may be more sensitive to near term investment volatility. Note investment returns have resulted in significant asset growth despite the negative cash flow.

	(A) Investment Experience Gains/(Losses)*	(B) Other Experience Gains/(Losses)*	(A)+(B) Total Experience Gain/(Loss)*
2013	\$588	\$55	\$643
2014	\$694	\$162	\$857
2015	\$540	\$50	\$590
2016	(\$184)	\$158	(\$27)
2017	\$237	\$197	\$435
2018	\$320	\$109	\$429
2019	(\$34)	\$127	\$93
2020	(\$156)	(\$3)	(\$159)
2021	\$1,075	(\$11)	\$1,064
2022	\$350	(\$140)	\$210

Experience Gains and Losses: As plan experience differs from actuarial assumptions, experience gains and losses will develop. If assumptions are appropriately determined, gains and losses are expected to offset over time. Consistent gains or losses may be an indication that actuarial assumptions need to be re-evaluated. TRSL’s consistent “other” experience gains result primarily from salary and mortality experience relative to assumptions. Following the most recent experience study, assumptions are expected to mirror actual experience more closely.

The risks identified and discussed above are the most significant risks based on the characteristics of the plan, however this is not an exhaustive list of potential risks that could be considered. Advanced modelling, as well as the identification of additional risks, can be helpful and can be provided upon request of the Board.

ACTUARIAL COST METHODS AND ASSUMPTIONS

ACTUARIAL COST METHOD:

Louisiana, R.S. 11:22, prescribes the Entry Age Normal cost method for funding valuation purposes. This cost method generally produces normal costs that are level as a percentage of the member's projected pay if the composition of the active group with regard to age, sex, and service is stable. Normal costs are attributed from the first period in which a member accrues benefits through all assumed exit ages until retirement.

ASSET VALUATION:

The market value of assets is adjusted to gradually recognize investment gains and losses relative to the discount rate, over a five-year period in 20% increments. The adjusted asset value is subject to Corridor Limits of 80% to 120% of the Market Value of Assets.

ACCOUNTING DISCLOSURE:

The Statements of Fiduciary Net Position and Changes in Fiduciary Net Position provided by the accounting staff were the final drafts prior to publication. Should these Statements differ from the final audited report, a revised actuarial valuation will be issued, but only to the extent that any difference in reporting affects the employer's contribution rate or the yield to the Actuarial Value of Assets.

ADMINISTRATIVE EXPENSES:

Administrative expenses are funded directly by employers as a percentage of projected payroll beginning July 1, 2018, in accordance with Act 94 of 2016. Projected administrative expenses are determined based on prior year actual expenses with consideration of any expected variations provided by TRSL Accounting Department staff.

POST RETIREMENT BENEFIT INCREASES:

The actuarial accrued liability includes previously granted post-retirement benefit increases. Louisiana law pertaining to TRSL retiree benefit increases provides for the funding of future increases by requiring the automatic transfer of a portion of excess investment earnings to the experience account, subject to the statutory maximum balance of the account. The law does not provide for automatic benefit increases. Many conditions must be met before an increase can be granted, as described in the Post-Retirement Increases section of the Summary of Plan Provisions in Appendix B of this report. The legislature and governor have the ultimate authority as to whether a future increase will be granted. Since a portion of investment earnings will be used to fund these benefits, if granted, the rate used to discount plan liabilities represents the long-term expected returns (net of investment expenses) less the expected returns used to fund future retiree benefit increases. This adjustment is made in accordance with Actuarial Standards of Practice No. 27 (paragraph 3.5.1) regarding the selection of economic assumptions, which states that it is appropriate to adjust the economic assumptions to provide for plan provisions that are difficult to measure, such as gain-sharing provisions.

ACTUARIAL ASSUMPTIONS:

Demographic and salary assumptions used in the valuation were adopted by the Board of Trustees following the most recent experience study, effective July 1, 2018. The study was based on an observation period of July 1, 2012-June 30, 2017. The Retirement System is required to conduct an experience study every five years, but the scope of such a study is not necessarily limited to a five-year period. The experience was reviewed separately for Regular Teachers, Higher Education, and the School Lunch Plans (Plan A and Plan B). The experience study report, dated March 1, 2018, provides further information regarding the rationale for these assumptions. The revised rate tables are illustrated at the end of this appendix.

INFLATION ASSUMPTION:

The Board of Trustees reduced the inflation assumption from 2.50% to 2.30%, effective July 1, 2020.

DISCOUNT RATE / INVESTMENT EARNINGS:

Funding Valuation Assumptions: The discount rate was reduced from 7.40% to 7.25% for purposes of determining the liabilities as of June 30, 2022 and the recommended contribution requirement for Fiscal Year 2023/2024.

The discount rate for funding purposes reflects the assumed investment rate of return, net of investment expenses, and net of investment gains expected to be allocated to the Experience Account to fund future permanent benefit increases (35 basis points). Therefore, by excluding returns expected to be used for purposes other than funding regular plan benefits, the discount rate represents the expected returns to be used to fund regular plan benefits.

June 30, 2022 GASB Assumptions: A discount rate of 7.25% is used for GASB reporting purposes.

MORTALITY ASSUMPTIONS:

The mortality tables for active, non-disabled retirees, and disabled retirees, were revised effective June 30, 2018, based on the most recent experience study.

Active Members Mortality Table: RP-2014 White Collar Employee tables for males and females, adjusted by 1.010 for males and by 0.997 for females.

Non-Disabled Retiree/Inactive Members: RP-2014 White Collar Healthy Annuitant tables for males and females, adjusted by 1.366 for males and by 1.189 for females.

Disability Retiree Mortality: RP-2014 Disability tables for males and females, adjusted by factors of 1.111 for males and by 1.134 for females.

The base tables for active members, non-disabled retirees, and disabled retirees are adjusted from 2014 to 2018 using the MP-2017 generational improvement table, with continued future mortality improvement projected using the MP-2017 generational mortality improvement tables.

DISABILITY ASSUMPTION:

Rates for total and permanent disability are based on attained age and were revised effective June 30, 2018, based on the most recent experience study.

RETIREMENT/DROP ASSUMPTION:

Eligibility for normal retirement benefits and DROP participation is based on age and service requirements that vary by plan. Retirement and DROP rates are developed in combination and include an age and service component. The rates were revised effective June 30, 2018, based on the most recent experience study.

TERMINATION ASSUMPTIONS:

Voluntary termination or withdrawal rates were revised effective June 30, 2018, based on the most recent experience study. Rates for Regular Teachers and Higher Education members are based on a combination of age and service. Rates for Lunch Plans A and B are based on service. For members terminating with vested benefits, it is assumed that 20% will elect to withdraw their accumulated employee contribution, and 80% will receive a benefit beginning at age 60.

SALARY GROWTH:

The rates of annual salary growth are based on the 2014-2018 experience study. The rates vary based upon the member's years of service. All salary growth assumptions were reduced by 0.20%, effective July 1, 2020, based on the reduction in the inflation assumption from 2.50% to 2.30%. The rates were developed as the inflation assumption plus the assumed real rates of wage growth, which include increases due to promotion and longevity (often called merit increases) which are generally service related. For valuation purposes, current salaries and projected future salaries are limited to the Section 401(a)(17) limit of the Internal Revenue Code, with future indexed increases.

CONVERTED LEAVE:

Converted Leave is assumed to increase the accrued benefit at retirement according to the following table, based on the most recent experience study. The reduction from the prior rates for regular teachers and the lunch plans to current rates shown below is due to statutory limits placed on the amount of leave earned after June 30, 1990 that can be converted to service credit. In the most recent experience study, higher education experience was reviewed independently from regular teachers. The study showed that higher education members convert significantly more leave to service credit at retirement.

	Current Rates
Regular Teachers	0.9%
Higher Education	3.0%
Lunch Plans A & B	0.9%

FAMILY STATISTICS:

The composition of the family is based on Current Population Reports published by the United States Census Bureau. 75% of the membership is assumed to be married with the wife assumed to be three (3) years younger than the husband. Sample rates are as follows:

Member Age	Number of Minor Children	Years for Youngest Child to Attain Majority
25	1.2	17
30	1.4	15
35	1.7	13
40	1.7	10
45	1.4	8
50	1.1	4

Actuarial Assumptions
Regular Teachers

AGE	DISABILITY RATES	TERMINATION RATES				RETIREMENT/DROP RATES			DUR	SALARY INCREASE
		< 1 YEAR	1-2 YEARS	2-3 YEARS	4+ YEARS	< 25 YOS	25-29 YOS	30+ YOS		Eff. July 1, 2020
18	0.0001	0.250	0.250	0.165	0.170	0.000	0.000	0.000	1	0.046
19	0.0001	0.250	0.250	0.165	0.170	0.000	0.000	0.000	2	0.037
20	0.0001	0.250	0.250	0.165	0.170	0.000	0.000	0.000	3	0.037
21	0.0001	0.250	0.250	0.165	0.170	0.000	0.000	0.000	4	0.037
22	0.0001	0.250	0.250	0.165	0.170	0.000	0.000	0.000	5	0.037
23	0.0001	0.180	0.200	0.165	0.170	0.000	0.000	0.000	6	0.035
24	0.0001	0.180	0.200	0.165	0.170	0.000	0.000	0.000	7	0.035
25	0.0001	0.180	0.135	0.165	0.090	0.000	0.000	0.000	8	0.035
26	0.0001	0.180	0.135	0.125	0.090	0.000	0.000	0.000	9	0.035
27	0.0001	0.180	0.135	0.122	0.090	0.000	0.000	0.000	10	0.035
28	0.0001	0.180	0.135	0.119	0.085	0.000	0.000	0.000	11	0.035
29	0.0001	0.180	0.135	0.116	0.080	0.000	0.000	0.000	12	0.035
30	0.0003	0.180	0.135	0.113	0.070	0.000	0.000	0.000	13	0.035
31	0.0003	0.180	0.135	0.110	0.070	0.000	0.000	0.000	14	0.032
32	0.0003	0.165	0.135	0.107	0.060	0.000	0.000	0.000	15	0.032
33	0.0003	0.165	0.135	0.104	0.060	0.000	0.000	0.000	16	0.032
34	0.0003	0.165	0.130	0.101	0.050	0.000	0.000	0.000	17	0.032
35	0.0007	0.165	0.130	0.098	0.050	0.000	0.000	0.000	18	0.032
36	0.0008	0.165	0.120	0.095	0.045	0.000	0.000	0.000	19	0.032
37	0.0009	0.165	0.120	0.095	0.045	0.000	0.000	0.000	20	0.032
38	0.0010	0.165	0.120	0.095	0.042	0.035	0.000	0.000	21	0.032
39	0.0011	0.165	0.120	0.092	0.042	0.035	0.000	0.000	22	0.032
40	0.0012	0.165	0.120	0.090	0.042	0.035	0.000	0.000	23	0.032
41	0.0013	0.165	0.120	0.090	0.042	0.035	0.000	0.000	24	0.032
42	0.0014	0.150	0.120	0.090	0.042	0.035	0.000	0.000	25	0.032
43	0.0015	0.150	0.120	0.090	0.042	0.035	0.000	0.000	26	0.032
44	0.0016	0.150	0.120	0.090	0.042	0.035	0.000	0.000	27	0.032
45	0.0019	0.150	0.120	0.090	0.042	0.035	0.020	0.000	28	0.032
46	0.0020	0.150	0.120	0.090	0.042	0.035	0.020	0.000	29	0.032
47	0.0022	0.150	0.120	0.090	0.042	0.035	0.020	0.000	30	0.032
48	0.0023	0.150	0.120	0.090	0.042	0.035	0.025	0.450	31	0.032
49	0.0025	0.150	0.120	0.090	0.042	0.035	0.025	0.450	32	0.032
50	0.0030	0.150	0.120	0.090	0.042	0.035	0.045	0.450	33	0.032
51	0.0035	0.150	0.120	0.090	0.042	0.035	0.140	0.600	34	0.032
52	0.0040	0.150	0.120	0.090	0.042	0.035	0.240	0.600	35	0.032
53	0.0045	0.150	0.120	0.090	0.042	0.040	0.240	0.450	36	0.032
54	0.0050	0.150	0.120	0.090	0.042	0.100	0.470	0.360	37	0.032
55	0.0050	0.150	0.120	0.090	0.042	0.180	0.760	0.270	38	0.032
56	0.0050	0.150	0.120	0.090	0.042	0.180	0.350	0.210	39	0.032
57	0.0050	0.150	0.120	0.090	0.042	0.180	0.310	0.220	40	0.032
58	0.0050	0.150	0.120	0.090	0.042	0.190	0.310	0.230	41	0.032
59	0.0050	0.150	0.120	0.090	0.100	0.235	0.250	0.230	42	0.032
60	0.0048	0.150	0.120	0.090	0.100	0.235	0.250	0.230	43	0.032
61	0.0046	0.150	0.120	0.090	0.100	0.145	0.250	0.230	44	0.032
62	0.0044	0.150	0.120	0.090	0.100	0.145	0.240	0.230	45	0.032
63	0.0042	0.150	0.120	0.090	0.100	0.145	0.220	0.210	46	0.032
64	0.0040	0.150	0.120	0.090	0.100	0.180	0.240	0.290	47	0.032
65	0.0034	0.150	0.120	0.090	0.100	0.250	0.235	0.270	48	0.032
66	0.0029	0.150	0.120	0.090	0.100	0.200	0.220	0.225	49	0.032
67	0.0024	0.150	0.120	0.090	0.100	0.200	0.220	0.225	50	0.032
68	0.0022	0.150	0.120	0.090	0.100	0.200	0.220	0.225	51	0.032
69	0.0020	0.150	0.120	0.090	0.100	0.200	0.220	0.225	52	0.032
70	0.0020	0.150	0.120	0.090	0.100	0.200	0.220	0.225	53	0.032
71	0.0020	0.150	0.120	0.090	0.100	0.200	0.220	0.225	54	0.032
72	0.0020	0.150	0.120	0.090	0.100	0.200	0.220	0.225	55	0.032
73	0.0020	0.150	0.120	0.090	0.100	0.200	0.220	0.225	56	0.032
74	0.0020	0.150	0.120	0.090	0.100	0.200	0.220	0.225	57	0.032

Actuarial Assumptions
Higher Education

AGE	DISABILITY RATES	TERMINATION RATES				RETIREMENT/DROP RATES			DUR	SALARY INCREASE
		< 1 YEAR	1-2 YEARS	2-3 YEARS	4+ YEARS	< 25 YOS	25-29 YOS	30+ YOS		Eff. July 1, 2020
18	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	1	0.046
19	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	2	0.046
20	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	3	0.043
21	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	4	0.037
22	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	5	0.037
23	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	6	0.037
24	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	7	0.037
25	0.0000	0.230	0.250	0.170	0.250	0.000	0.000	0.000	8	0.037
26	0.0000	0.230	0.210	0.230	0.250	0.000	0.000	0.000	9	0.037
27	0.0000	0.230	0.210	0.220	0.200	0.000	0.000	0.000	10	0.034
28	0.0001	0.230	0.210	0.215	0.120	0.000	0.000	0.000	11	0.034
29	0.0001	0.230	0.210	0.210	0.120	0.000	0.000	0.000	12	0.034
30	0.0001	0.230	0.210	0.205	0.120	0.000	0.000	0.000	13	0.034
31	0.0001	0.230	0.180	0.200	0.120	0.000	0.000	0.000	14	0.034
32	0.0001	0.210	0.180	0.195	0.120	0.000	0.000	0.000	15	0.034
33	0.0001	0.210	0.180	0.190	0.120	0.000	0.000	0.000	16	0.034
34	0.0001	0.210	0.180	0.185	0.100	0.000	0.000	0.000	17	0.034
35	0.0002	0.210	0.180	0.180	0.100	0.000	0.000	0.000	18	0.034
36	0.0002	0.210	0.180	0.175	0.090	0.000	0.000	0.000	19	0.031
37	0.0002	0.195	0.180	0.170	0.090	0.000	0.000	0.000	20	0.031
38	0.0002	0.195	0.180	0.165	0.090	0.080	0.050	0.400	21	0.031
39	0.0003	0.195	0.180	0.160	0.080	0.080	0.050	0.400	22	0.031
40	0.0003	0.195	0.180	0.155	0.080	0.080	0.050	0.400	23	0.031
41	0.0004	0.195	0.200	0.153	0.080	0.080	0.050	0.400	24	0.031
42	0.0004	0.195	0.200	0.151	0.080	0.080	0.050	0.400	25	0.031
43	0.0005	0.195	0.200	0.149	0.080	0.070	0.050	0.400	26	0.031
44	0.0006	0.195	0.200	0.147	0.080	0.045	0.050	0.400	27	0.031
45	0.0007	0.195	0.200	0.145	0.080	0.045	0.050	0.400	28	0.031
46	0.0008	0.195	0.190	0.143	0.080	0.033	0.050	0.400	29	0.031
47	0.0008	0.195	0.180	0.141	0.080	0.033	0.050	0.400	30	0.031
48	0.0008	0.195	0.170	0.139	0.080	0.033	0.050	0.400	31	0.031
49	0.0008	0.195	0.160	0.137	0.080	0.033	0.050	0.400	32	0.031
50	0.0008	0.195	0.150	0.135	0.080	0.033	0.050	0.400	33	0.031
51	0.0008	0.195	0.140	0.133	0.080	0.033	0.100	0.500	34	0.031
52	0.0008	0.195	0.140	0.131	0.080	0.033	0.100	0.250	35	0.031
53	0.0008	0.195	0.140	0.129	0.080	0.033	0.100	0.250	36	0.031
54	0.0008	0.195	0.140	0.127	0.080	0.100	0.320	0.400	37	0.031
55	0.0008	0.195	0.140	0.125	0.080	0.125	0.500	0.155	38	0.031
56	0.0008	0.195	0.140	0.123	0.080	0.125	0.250	0.155	39	0.031
57	0.0008	0.195	0.140	0.121	0.080	0.100	0.200	0.155	40	0.031
58	0.0008	0.195	0.140	0.119	0.080	0.145	0.120	0.155	41	0.031
59	0.0006	0.195	0.140	0.117	0.080	0.160	0.135	0.155	42	0.031
60	0.0004	0.195	0.140	0.115	0.080	0.200	0.180	0.155	43	0.031
61	0.0003	0.195	0.140	0.115	0.080	0.120	0.150	0.155	44	0.031
62	0.0002	0.195	0.140	0.115	0.080	0.120	0.150	0.155	45	0.031
63	0.0001	0.195	0.140	0.115	0.080	0.080	0.150	0.155	46	0.031
64	0.0001	0.195	0.140	0.115	0.080	0.130	0.120	0.155	47	0.031
65	0.0001	0.195	0.140	0.115	0.080	0.180	0.165	0.155	48	0.031
66	0.0001	0.195	0.140	0.115	0.080	0.180	0.180	0.155	49	0.031
67	0.0001	0.195	0.140	0.115	0.080	0.140	0.100	0.155	50	0.031
68	0.0001	0.195	0.140	0.115	0.080	0.140	0.100	0.155	51	0.031
69	0.0001	0.195	0.140	0.115	0.080	0.140	0.160	0.155	52	0.031
70	0.0001	0.195	0.140	0.115	0.080	0.140	0.160	0.155	53	0.031
71	0.0001	0.195	0.140	0.115	0.080	0.140	0.160	0.155	54	0.031
72	0.0001	0.195	0.140	0.115	0.080	0.140	0.160	0.155	55	0.031
73	0.0001	0.195	0.140	0.115	0.080	0.140	0.160	0.155	56	0.031
74	0.0001	0.195	0.140	0.115	0.080	0.140	0.160	0.155	57	0.031

Actuarial Assumptions
Lunch Plans A and B

AGE	DISABILITY RATES	RETIREMENT/ DROP RATES	DUR	TERMINATION RATES	SALARY INCREASE
					Eff. July 1, 2020
18	0.0000	0.000	0	0.150	0.044
19	0.0000	0.000	1	0.135	0.044
20	0.0000	0.000	2	0.120	0.034
21	0.0000	0.000	3	0.105	0.031
22	0.0000	0.000	4	0.090	0.031
23	0.0000	0.000	5	0.075	0.031
24	0.0000	0.000	6	0.060	0.031
25	0.0000	0.000	7	0.045	0.031
26	0.0000	0.000	8	0.045	0.031
27	0.0000	0.000	9	0.045	0.031
28	0.0000	0.000	10	0.045	0.031
29	0.0000	0.000	11	0.045	0.031
30	0.0000	0.000	12	0.045	0.031
31	0.0000	0.000	13	0.045	0.031
32	0.0000	0.000	14	0.045	0.031
33	0.0000	0.000	15	0.045	0.031
34	0.0000	0.000	16	0.045	0.031
35	0.0001	0.000	17	0.045	0.031
36	0.0003	0.000	18	0.045	0.031
37	0.0005	0.000	19	0.045	0.031
38	0.0007	0.500	20	0.045	0.031
39	0.0009	0.500	21	0.045	0.031
40	0.0011	0.500	22	0.045	0.031
41	0.0015	0.500	23	0.045	0.031
42	0.0019	0.500	24	0.045	0.031
43	0.0024	0.500	25	0.045	0.031
44	0.0029	0.500	26	0.045	0.031
45	0.0037	0.500	27	0.045	0.031
46	0.0045	0.500	28	0.045	0.031
47	0.0050	0.500	29	0.045	0.031
48	0.0056	0.500	30	0.045	0.031
49	0.0064	0.500	31	0.045	0.031
50	0.0074	0.500	32	0.045	0.031
51	0.0084	0.500	33	0.045	0.031
52	0.0094	0.500	34	0.045	0.031
53	0.0098	0.500	35	0.045	0.031
54	0.0098	0.500	36	0.045	0.031
55	0.0100	0.700	37	0.045	0.031
56	0.0100	0.430	38	0.045	0.031
57	0.0100	0.390	39	0.045	0.031
58	0.0100	0.350	40	0.045	0.031
59	0.0100	0.330	41	0.045	0.031
60	0.0030	0.430	42	0.045	0.031
61	0.0025	0.230	43	0.045	0.031
62	0.0020	0.230	44	0.045	0.031
63	0.0015	0.230	45	0.045	0.031
64	0.0011	0.300	46	0.045	0.031
65	0.0009	0.280	47	0.045	0.031
66	0.0008	0.240	48	0.045	0.031
67	0.0007	0.240	49	0.045	0.031
68	0.0006	0.240	50	0.045	0.031
69	0.0005	0.240	51	0.045	0.031
70	0.0005	0.240	52	0.045	0.031
71	0.0005	0.240	53	0.045	0.031
72	0.0005	0.240	54	0.045	0.031
73	0.0005	0.240	55	0.045	0.031
74	0.0005	0.240	56	0.045	0.031

Actuarial Assumptions
Mortality Tables

Active Member Mortality

Adjusted RP-2014 Base Table			Projected 2020 Table			Projected 2050 Table		
Age	Male	Female	Age	Male	Female	Age	Male	Female
20	0.000288	0.000137	20	0.000266	0.000132	20	0.000195	0.000099
30	0.000320	0.000183	30	0.000329	0.000190	30	0.000243	0.000142
40	0.000444	0.000333	40	0.000462	0.000346	40	0.000357	0.000267
50	0.001194	0.000927	50	0.001115	0.000889	50	0.000849	0.000679
60	0.003321	0.002054	60	0.003312	0.002093	60	0.002448	0.001567

Non-Disabled Retiree Mortality

Adjusted RP-2014 Base Table			Projected 2020 Table			Projected 2050 Table		
Age	Male	Female	Age	Male	Female	Age	Male	Female
50	0.003776	0.002468	50	0.003525	0.002367	50	0.002685	0.001807
60	0.007137	0.004626	60	0.007118	0.004714	60	0.005261	0.003530
70	0.016941	0.012549	70	0.016409	0.011871	70	0.012455	0.009030
80	0.050961	0.036168	80	0.048168	0.034546	80	0.035915	0.025595
90	0.172376	0.119146	90	0.164979	0.115535	90	0.125508	0.088364

Disabled Mortality

Adjusted RP-2014 Base Table			Projected 2020 Table			Projected 2050 Table		
Age	Male	Female	Age	Male	Female	Age	Male	Female
30	0.008794	0.003405	30	0.009051	0.003535	30	0.006678	0.002650
40	0.012218	0.006185	40	0.012703	0.006419	40	0.009821	0.004966
50	0.022659	0.013503	50	0.021153	0.012952	50	0.016114	0.009884
60	0.029557	0.019277	60	0.029479	0.019645	60	0.021788	0.014709
70	0.044824	0.031982	70	0.043417	0.030254	70	0.032955	0.023015
80	0.085120	0.069215	80	0.080455	0.066111	80	0.059989	0.048982

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
June 30, 2022 (7.25% discount rate)

Date	Description	Notes	Amtz. Period	Beginning Liability	Years Remain	Remaining Balance	Mid-Year Payment
2022	OAB	Note 1	7	968,958,274	7	968,958,274	210,140,975
2022	EAAB	Note 2,3	18	2,195,892,037	18	2,195,892,037	269,430,449
2022	2009 Experience G/L		17	2,400,647,935	17	2,400,647,935	241,557,933
2022	2010 Experience G/L		18	952,466,967	18	952,466,967	93,087,222
2022	2011 Experience G/L		19	(148,556,729)	19	(148,556,729)	(14,140,287)
2022	2012 Experience G/L		20	109,008,183	20	109,008,183	10,129,611
2022	2013 Experience G/L		21	(219,765,462)	21	(219,765,462)	(19,979,601)
2022	2013 Assump/Asset Method Chg		21	747,988,262	21	747,988,262	68,002,075
2022	2014 Assump/Cost Method Chg		22	1,307,796,833	22	1,307,796,833	116,543,379
2022	2014 Liability G/L		22	(146,227,624)	22	(146,227,624)	(13,030,970)
2022	2015 Experience G/L		23	(345,171,263)	23	(345,171,263)	(30,202,440)
2022	2016 Experience G/L		24	24,769,426	24	24,769,426	2,131,320
2022	2017 Discount Rate Change		25	127,594,026	25	127,594,026	10,811,557
2022	2017 Experience G/L		25	(204,886,473)	25	(204,886,473)	(17,360,858)
2022	2017 Experience Acct Allocation		5	5,835,360	5	5,835,360	1,383,457
2022	2018 Disc Rate/Assump Change		26	658,278,811	26	658,278,811	54,996,521
2022	2018 Experience G/L		26	(189,766,009)	26	(189,766,009)	(15,854,179)
2022	2018 Experience Acct Allocation		6	30,401,510	6	30,401,510	6,206,371
2022	2019 Experience G/L		27	(89,725,642)	27	(89,725,642)	(7,399,475)
2022	2019 Discount Rate Change		27	289,004,569	27	289,004,569	23,833,566
2022	2020 Disc Rate/Sal Change		28	221,016,064	28	221,016,064	18,009,998
2022	2020 Experience G/L		28	155,905,225	28	155,905,225	12,704,293
2022	2021 Discount Rate Change		19	155,497,629	19	155,497,629	14,800,952
2022	2021 Experience G/L		19	(772,720,583)	19	(772,720,583)	(73,550,964)
2022	2021 Experience Acct Allocation		9	246,982,602	9	246,982,602	36,995,029
2022	2022 Experience G/L		20	79,834,647	20	79,834,647	7,418,654
2022	2022 Experience Acct Allocation		10	30,502,699	10	30,502,699	4,242,134
2022	2022 Discount Rate Change		20	498,139,277	20	498,139,277	46,289,711
Total Unfunded Actuarial Accrued Liability						\$ 9,089,700,551	\$ 1,057,196,433

See UAL Amortization Schedule Notes within this Appendix.

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
Projected June 30, 2023 (7.25% discount rate)

Date	Description	Notes	Amtz. Period	Beginning Liability	Years Remain	Remaining Balance	Mid-Year Payment
2022	OAB	Note 1	7	968,958,274	6	821,582,444	210,140,975
2022	EAAB	Note 2,3	18	2,195,892,037	17	2,050,073,484	269,430,449
2022	2009 Experience G/L		17	2,400,647,935	16	2,324,533,708	241,557,933
2022	2010 Experience G/L		18	952,466,967	17	925,118,228	93,087,222
2022	2011 Experience G/L		19	(148,556,729)	18	(144,683,188)	(14,140,287)
2022	2012 Experience G/L		20	109,008,183	19	106,420,891	10,129,611
2022	2013 Experience G/L		21	(219,765,462)	20	(215,007,268)	(19,979,601)
2022	2013 Assump/Asset Method Chg		21	747,988,262	20	731,793,391	68,002,075
2022	2014 Assump/Cost Method Chg		22	1,307,796,833	21	1,281,917,943	116,543,379
2022	2014 Liability G/L		22	(146,227,624)	21	(143,334,049)	(13,030,970)
2022	2015 Experience G/L		23	(345,171,263)	22	(338,918,057)	(30,202,440)
2022	2016 Experience G/L		24	24,769,426	23	24,357,981	2,131,320
2022	2017 Discount Rate Change		25	127,594,026	24	125,647,974	10,811,557
2022	2017 Experience G/L		25	(204,886,473)	24	(201,761,564)	(17,360,858)
2022	2017 Experience Acct Allocation		5	5,835,360	4	4,825,694	1,383,457
2022	2018 Disc Rate/Assump Change		26	658,278,811	25	649,048,761	54,996,521
2022	2018 Experience G/L		26	(189,766,009)	25	(187,105,207)	(15,854,179)
2022	2018 Experience Acct Allocation		6	30,401,510	5	26,178,203	6,206,371
2022	2019 Experience G/L		27	(89,725,642)	26	(88,567,738)	(7,399,475)
2022	2019 Discount Rate Change		27	289,004,569	26	285,274,984	23,833,566
2022	2020 Disc Rate/Sal Change		28	221,016,064	27	218,388,291	18,009,998
2022	2020 Experience G/L		28	155,905,225	27	154,051,588	12,704,293
2022	2021 Discount Rate Change		19	155,497,629	18	151,443,108	14,800,952
2022	2021 Experience G/L		19	(772,720,583)	18	(752,572,288)	(73,550,964)
2022	2021 Experience Acct Allocation		9	246,982,602	8	226,576,206	36,995,029
2022	2022 Experience G/L		20	79,834,647	19	77,939,784	7,418,654
2022	2022 Experience Acct Allocation		10	30,502,699	9	28,320,924	4,242,134
2022	2022 Discount Rate Change		20	498,139,277	19	486,316,021	46,289,711
Total Unfunded Actuarial Accrued Liability						\$ 8,627,860,249	\$ 1,057,196,433

See UAL Amortization Schedule Notes within this Appendix.

UAL Amortization Schedule Notes

Act 497 of 2009 consolidated all schedules established prior to 2009 into two amortization schedules, the Original Amortization Base (OAB) and the Experience Account Amortization Base (EAAB). The OAB consists of the outstanding balance of the Initial Unfunded Accrued Liability and schedules with negative outstanding balances. The outstanding balance of this schedule was credited with funds from the Initial UAL account, excluding the subaccount of this fund, and the balance of the Employer Credit Account. The OAB payment schedule is prescribed by statute, as described in Note 1 below. The EAAB consists of the 2004 schedule and all remaining schedules. The outstanding balance of this schedule was credited with the balance of funds from the Initial UAL subaccount, which were transferred from the Employee Experience Account on June 30, 2009. The EAAB payment schedule is prescribed by statute, as described in Note 2 below.

Effective July 1, 2022, all schedules were re-amortized using a discount rate of 7.25%. Projected July 1, 2023 schedules are based on a 7.25% discount rate.

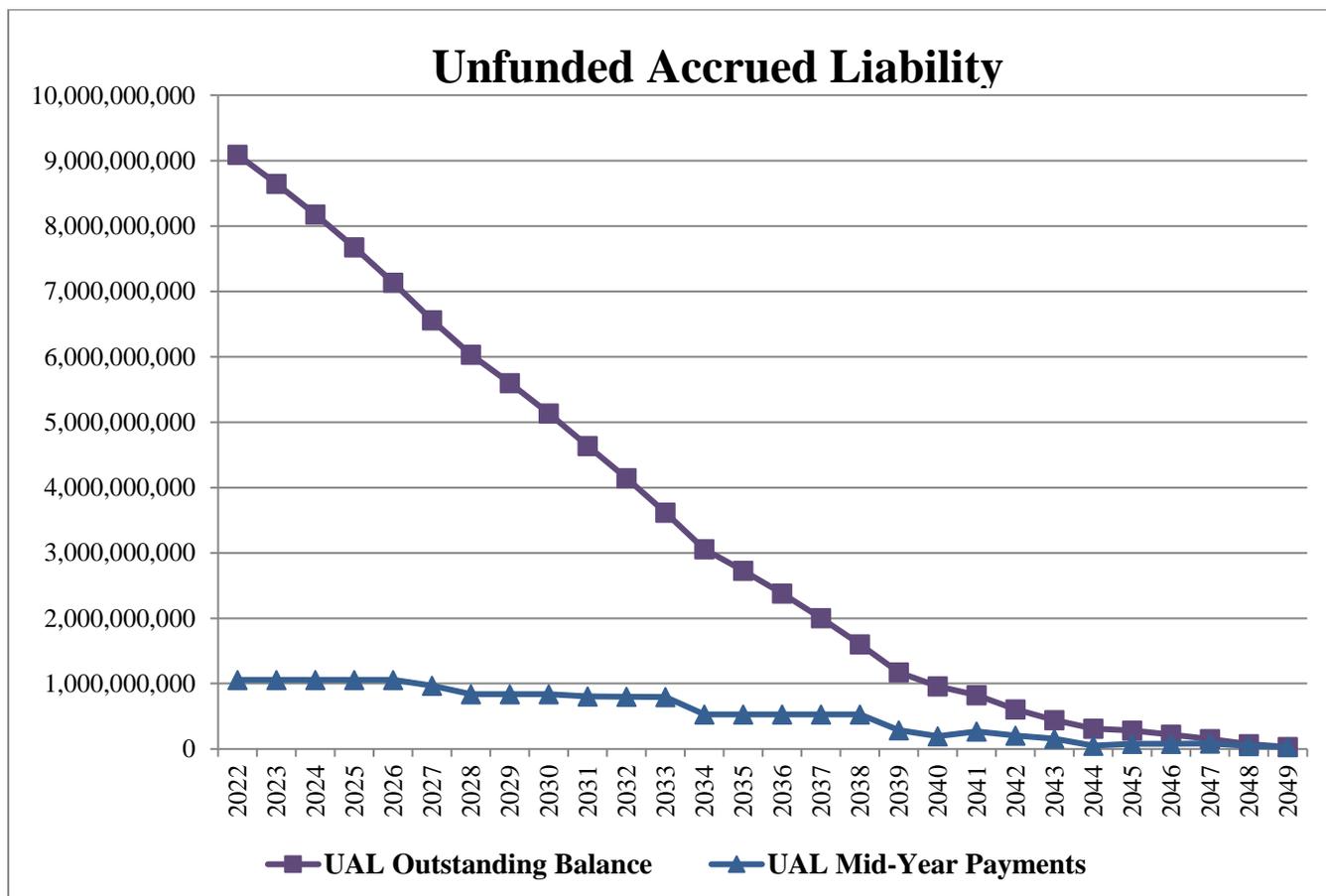
Note 1: Act 497 of 2009 created the Original Amortization Base, effective July 1, 2010, which includes the Initial Unfunded Accrued Liability (IUAL) and certain negative bases that existed before 2009. The combined balance was reduced by applying funds from the IUAL Fund, excluding the subaccount of this fund. In addition to regular payments and contribution variance credits, the schedule was reduced by investment gains up to the annual “thresholds” created by Act 497 of 2009 and Act 399 of 2014. The schedule was credited appropriations from Act 55 of 2014, Act 56 of 2015, Act 59 of 2018, Act 50 of 2019, Act 255 of 2020, Act 120 of 2021 and Act 170 of 2022. Future payments will be level, or will decrease upon reamortization, until paid off on or before 2029.

Note 2: Act 497 of 2009 created the Experience Account Amortization Base, which combined the liability resulting from Act 588 of 2004 which zeroed out the Experience Account, and certain other positive schedules that existed prior to 2009. The combined balance was reduced by applying funds from the subaccount of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009. In addition to regular payments and contribution variance credits, the schedule was reduced by investment gains up to the annual “thresholds” created by Act 497 of 2009 and Act 399 of 2014. Future payments will be level, or will decrease upon reamortization, until paid off on or before 2040.

Note 3: The 2012 contribution variance surplus of \$7,169,301 was used to reduce and re-amortize the EAAB, per Act 497 of 2009. The 2014-2022 contribution variance surpluses were used to reduce the EAAB, per Act 399 of 2014. The 2022 contribution variance surplus was updated from last year’s projected amount to \$144,147,469. The projected contribution variance surplus for 2023 is \$25,994,306.

UAL Outstanding Balance and Payment Schedule
Based on June 30, 2023 Projected UAL Schedules

FY Beginning	UAL Outstanding Balance (Millions)	UAL Mid-Year Payments (Millions)	Payment % Change	FY Beginning	UAL Outstanding Balance (Millions)	UAL Mid-Year Payments (Millions)	Payment % Change
2022	9,090	1,057		2037	2,003	529	0.0%
2023	8,628	1,057	0.0%	2038	1,601	529	0.0%
2024	8,159	1,057	0.0%	2039	1,170	287	-45.7%
2025	7,655	1,057	0.0%	2040	957	194	-32.4%
2026	7,115	1,057	0.0%	2041	825	267	37.5%
2027	6,536	967	-8.5%	2042	608	203	-23.9%
2028	6,009	839	-13.2%	2043	442	155	-23.6%
2029	5,575	839	0.0%	2044	313	52	-66.7%
2030	5,110	839	0.0%	2045	283	82	58.5%
2031	4,611	802	-4.4%	2046	218	80	-2.6%
2032	4,114	798	-0.5%	2047	152	86	8.2%
2033	3,586	764	-4.3%	2048	73	47	-45.4%
2034	3,055	529	-30.8%	2049	30	31	-34.9%
2035	2,728	529	0.0%	2050	0	0	-100.0%
2036	2,379	529	0.0%				



Components of Original Amortization Base
(Dollar amounts in millions)

	Annual Outstanding Balance					Annual Payments				
	IUAL	Other Schedules	IUAL Acct	Employer Credit Account	Total OAB	IUAL	Other Schedules	IUAL Acct	Employer Credit Account	Total OAB
2022	3,654.3	(2,367.0)	(254.6)	(63.8)	969.0	792.5	(513.3)	(55.2)	(13.8)	210.1
2023	3,098.5	(2,007.0)	(215.8)	(54.1)	821.6	792.5	(513.3)	(55.2)	(13.8)	210.1
2024	2,502.4	(1,620.8)	(174.3)	(43.7)	663.5	792.5	(513.3)	(55.2)	(13.8)	210.1
2025	1,863.1	(1,206.7)	(129.8)	(32.5)	494.0	792.5	(513.3)	(55.2)	(13.8)	210.1
2026	1,177.4	(762.6)	(82.0)	(20.6)	312.2	792.5	(513.3)	(55.2)	(13.8)	210.1
2027	442.0	(286.3)	(30.8)	(7.7)	117.2	457.7	(296.5)	(31.9)	(8.0)	121.4
2028	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	-

Totals may not add due to rounding.

This table has changed from previously published tables due the 2022 legislative appropriation allocated to the IUAL and the change in discount rate from 7.40% to 7.25%.

GLOSSARY

Accrued Benefit – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

Actuarial Accrued Liability – Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the actuarial present value of benefits attributable to service credit earned (or accrued) as of the valuation date.

Actuarial Present Value of Benefits – Amount which, together with future interest, is expected to be sufficient to pay all benefits to be paid in the future, regardless of when earned, as determined by the application of a particular set of actuarial assumptions; equivalent to the actuarial accrued liability plus the present value of future normal costs attributable to the members.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of investment earnings, changes in compensation, rates of mortality, withdrawal, disablement, and retirement as well as statistics related to marriage and family composition.

Actuarial Cost Method – A method of determining the portion of the cost of a pension plan to be allocated to each year; sometimes referred to as the "actuarial funding method." Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs.

Actuarial Equivalence – Series of payments with equal actuarial present values on a given date when valued using the same set of actuarial assumptions.

Actuarial Present Value - The amount of funds required as of a specified date to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments between the specified date and the expected date of payment.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to market value of assets, or some modification using an asset valuation method to reduce the volatility of asset values.

Actuarially Reduced – The method of adjusting a benefit received at an early date or paid in a form other than the lifetime of the member so that the expected total cost to the retirement system is equivalent to the cost if the benefit did not begin until later, or was paid for the lifetime of the member.

Asset Gain (Loss) – That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

Amortization – Paying off an interest-discounted amount with periodic payments of interest and (generally) principal, as opposed to paying off with a lump sum payment.

Amortization Payment – That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

GLOSSARY

Contribution Variance – The difference between actuarially required contribution and the actual amount received based upon a projected contribution rate. Results in an increase or decrease to future required contributions.

Discount Rate – The interest rate used in developing present values to reflect the time value of money.

Decrements – Events which result in the termination of membership such as retirement, disability, withdrawal, or death.

Employer Normal Cost – Portion of the normal cost, excluding administrative expenses, not paid by employee contributions.

Entry Age Normal (EAN) Funding Method – A standard actuarial funding method whereby each member's normal costs (service costs) are generally level as a percentage of pay from entry age until retirement. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the UAL.

Experience Gain (Loss) – The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities during the period between two valuation dates. It is a measurement of the difference between actual and expected experience and may be related to investment earnings above (or below) those expected or changes in the liability due to fewer (or greater) than expected numbers of retirements, deaths, disabilities, or withdrawals, or variances in pay increases relative to assumed pay increases. The effect of such gains (or losses) is to decrease (or increase) future costs.

Experience Account Amortization Base (EAAB) – Amortization base created in 2010 by Act 497 of 2009. Consolidated and re-amortized schedules created in the following valuation years, which existed prior to Act 497: 1997, 2001-2003, 2004 (the liability resulting from Act 588 of 2004 which zeroed out the Experience Account), and 2008. The new combined balance was credited with funds from the sub-account of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009. See Note 2 in Appendix D for additional details.

Funded Ratio – A measure of the ratio of the actuarial value of assets to liabilities of the system. Typically, the assets used in the measure are the actuarial value of assets as determined by the asset valuation method adopted by the Board of Trustees; the liabilities are determined using the actuarial funding method specified by Louisiana statute. Thus, the funded ratio depends not only on the financial strength of the plan but also on the asset valuation method used to determine the assets and on the actuarial cost method used to determine the liabilities.

Governmental Accounting Standards Board (GASB) – Governmental agency that sets the accounting standards for state and local government operations.

Market Value of Assets (MVA) – The value of assets as they would trade on an open market.

Normal Cost – Computed differently under different funding methods, generally that portion of the actuarial present value of benefits allocated to the current plan year.

GLOSSARY

Original Amortization Base (OAB) – Amortization base created in 2010 by Act 497 of 2009. Consolidated and re-amortized schedules created in the following valuation years, which existed prior to Act 497: 1993 (Initial Unfunded Accrued Liability), 1993 (Change in Liability), 1994-1996, 1998-2000, and 2005-2008. See Note 1 in Appendix D for additional details.

Permanent Benefit Increase – An increase in specified current retiree benefits authorized by statutes.

Projected Benefits – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

Projected Unit Credit (PUC) Funding Method – A standard actuarial funding method whereby the actuarial present value of projected benefits of each individual is accumulated from the participant's attained age to anticipated retirement. The portion attributable to current year benefit accruals is called the normal cost. The actuarial present value of future benefits in proportion to service accrued on the date of valuation is called the actuarial accrued liability. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the unfunded actuarial accrued liability.

Public Retirement Systems' Actuarial Committee (PRSAC) – A committee created by state law within the Louisiana Department of the Treasury to ensure orderly and consistent strategies for continuing development and growth that will attain and maintain the soundness of the public retirement systems, plans and funds and to report all findings and recommendations to the House and Senate committees on retirement and the Joint Legislative Committee on the Budget.

Side-Fund Assets – Assets held in the trust for purposes other than for paying the accrued benefits or administrative expenses of the plan.

Unfunded Actuarial Accrued Liability (UAAL or UAL) – The excess of the actuarial accrued liability over the valuation assets; sometimes referred to as "unfunded past service liability". UAL increases (decreases) each time an actuarial loss (gain) occurs and when new benefits are added without being fully funded initially.

Valuation Assets – The actuarial value of assets less side-fund assets; represents the portion of the actuarial value of assets available to pay the accrued benefits of the plan.

Vested Benefit – Benefits that the members are entitled to regardless of employment status.